NEENAH PUBLIC LIBRARY
0 04 04 0287958 5

NEENAH PUBLIC LIBRARY
NEENAH, WISCONSIN

Bio

Lu4 - 338

LIFE OF
ADMIRAL OF THE FLEET
SIR ARTHUR KNYVET WILSON,
BART., V.C., G.C.B., O.M., G.C.V.O.

All rights reserved

Digitized by the Internet Archive
in 2024

https://archive.org/details/lifeofadmiraloff0000brad

ADMIRAL OF THE FLEET SIR ARTHUR KNYVET WILSON,
V.C., G.C.B., O.M., G.C.V.O., D.C.L.

[*Frontispiece.*

LIFE OF ADMIRAL OF THE FLEET SIR ARTHUR KNYVET WILSON

BART., V.C., G.C.B., O.M., G.C.V.O.

BY

ADMIRAL SIR EDWARD E. BRADFORD
K.C.B., C.V.O.

LONDON
JOHN MURRAY, ALBEMARLE STREET, W. 1
1923

PRINTED IN GREAT BRITAIN BY
BILLING AND SONS, LTD., GUILDFORD AND ESHER

B
WL91B

TO THE

OFFICERS AND SHIP'S COMPANY OF

H.M.S. "EXMOUTH"

(1904–1907)

PREFACE

HAVING had the good fortune to serve under Sir Arthur Wilson for six years as his Flag Captain and Chief of the Staff, in the *Majestic*, *Revenge*, and *Exmouth*, and being therefore well acquainted with many of the facts and events of an important period of his career, I was asked by his relatives to write or compile his biography. I felt that this task was worthy of a more competent hand than mine and I hesitated, but urged by their wishes, and by the fact that my long association with him officially had ripened into a warm feeling of friendship and regard which called for an effort to perpetuate his memory, I agreed to make the attempt. The kind sympathy and help that I received from Miss Wilson and others encouraged me to persevere, and I now present the results in the following pages.

Sir Arthur Wilson's naval career began in a sailing ship of the line and ended as First Sea Lord of the Admiralty, after the *Dreadnought* had become the accepted type of capital ship. In the course of the revolution in ideas and practice which was involved in this far-reaching change in ships and in their motive power and weapons, he contributed very largely to the development of the mine, to the invention of the submerged torpedo-tube for use on board ships, and at the same time to the corresponding measures of defence for the protection of ships from attack by these weapons. He greatly extended the range of signalling at sea by his invention of the truck semaphore and sea heliograph, he took a prominent part in adding to the Navy a large number of cruisers and destroyers, and as a commander of squadrons and

fleets he led the way in the application of modern appliances to tactics and manœuvres. Finally, in addition to the distinction of having won the Victoria Cross, he showed an ability to command, and a force of character and example, which gained him the confidence of all ranks in his profession.

My information has been obtained from a number of private letters and diaries which were placed at my disposal by Miss Wilson, from such official correspondence as Sir Arthur had preserved, from Admiralty records, Parliamentary and newspaper reports, and from accounts of events which have been kindly furnished by some of his contemporaries and old shipmates.

My thanks are due to Lord Selborne for his permission to make use of two letters; to Sir Oswyn Murray and the staff of the Admiralty Library for their advice and never-failing readiness to find a report or record of which I was in need; to Admiral Sir Cyprian Bridge, Rear-Admiral Sir Sidney Eardly Wilmot, Admiral of the Fleet Sir Doveton Sturdee, Vice-Admiral Sir Henry Oliver, and many others; lastly, to my wife for the advice, encouragement, and help she has so freely given me throughout the performance of my task.

E. E. B.

29th March, 1923.

CONTENTS

CHAPTER		PAGE
I.	BIRTH, PARENTAGE, SCHOOL, MIDSHIPMAN (1842-1864)	1
II.	LIEUTENANT: "GLADIATOR," "EXCELLENT," MISSION TO JAPAN, "BRITANNIA," "CALEDONIA," AND "NARCISSUS" (1864-1873)	22
III.	COMMANDER: "RALEIGH" AND "VERNON" (1874-1880)	42
IV.	CAPTAIN: "HECLA" (1881-1884)	55
V.	CAPTAIN: "RALEIGH," ADMIRALTY, AND "VERNON" (1885-1892)	100
VI.	CAPTAIN: "SANS PAREIL" (1892-1895)	116
VII.	REAR-ADMIRAL: TORPEDO MANŒUVRES, ETC., CONTROLLER (1895-1901)	134
VIII.	REAR-ADMIRAL COMMANDING: CHANNEL SQUADRON (1901-1903)	156
IX.	COMMANDER-IN-CHIEF: HOME FLEET (1903-1904)	181
X.	COMMANDER-IN-CHIEF: CHANNEL FLEET (1905-1907)	198
XI.	FIRST SEA LORD, ETC. (1907-1911)	222
XII.	THE WAR, ADMIRALTY, CONCLUSION (1914-1921)	239

LIST OF ILLUSTRATIONS

ADMIRAL OF THE FLEET SIR ARTHUR KNYVET WILSON, V.C., G.C.B., O.M., G.C.V.O., D.C.L. - *Frontispiece*

PAGE

CAPTAIN WILSON AND THE GARDNER GUNS CREW H.M.S. "HECLA" LANDED AT TRINKITAT AND SUAKIN, 1884 - - - - - - *facing* 86

CAPTAIN A. K. WILSON, R.N., V.C., H.M.S. "RALEIGH" „ 100

THE ATTEMPT TO JUMP THE BOOM - - „ 113

THE BOOM - - - - - - - - 113

LOSS OF H.M.S. "VICTORIA." DIAGRAM SHOWING POSITIONS OF SHIPS - - - - - - 125

DIAGRAM OF A CRUISER PROBLEM - - - - 211

MEMORIAL BRONZE TABLET ERECTED IN SWAFFHAM CHURCH - - - - - *facing* 250

ADMIRAL OF THE FLEET
SIR ARTHUR KNYVET WILSON

CHAPTER I

BIRTH, PARENTAGE, SCHOOL, MIDSHIPMAN (1842-1864)

Arthur Knyvet Wilson was born at Swaffham, in Norfolk, on the 4th of March, 1842. He was the third son of Commander George Knyvet Wilson and his wife, Agnes Mary. The family consisted of the two elder sons, William and Roland, and after Arthur there were born two daughters, who were named Edith and Katherine, but all of them, except Edith, were baptized with the second name of Knyvet, derived from distinguished forbears on the father's side.

The Wilsons trace their descent back to Thomas of Woodstock, the youngest son of Edward III., but it will suffice the purpose of this memoir to describe only the more recent steps in this ancient lineage.

In 1720 Henry Wilson, of Didlington in Norfolk, married Elizabeth Knyvet, a descendant of Edmund Knyvet, Sergeant Porter to King Henry VIII. This Elizabeth was heiress to the barony of Berners, but the title was in abeyance, and continued so until her grandson, Robert Wilson, successfully established his claim to it, and was created, in 1832, Baron Berners, of Didlington and Ashwellthorpe, the latter place having been for many generations the home of the Knyvet family.

George Wilson, a younger brother of Robert, Lord Berners, entered Holy Orders, married Anna Maria, daughter of the Rev. Charles Millard, Chancellor of

Norwich, and settled at Kirby Cane Hall, near Norwich. By her he had thirteen sons, of whom George Knyvet, the father of our Arthur, was the eldest. Of the others, it will be sufficient to mention only one, Archdale, the fifth son, who subsequently rose to distinction as the captor of Delhi from the rebels in the Indian Mutiny, a service for which he was created a baronet in 1858, with a remainder to his brother Knyvet's sons failing male issue of his own.

After being educated at Hingham Grammar School and at Blackheath, George Knyvet (always called Knyvet in the family circle) joined the Royal Navy as a first-class boy (as the volunteers were then called) on board the *Minden*, being then fourteen years of age. As a mate, he was wounded in a small but desperate engagement with some slavers at Lagos, on the West Coast of Africa, in 1823, was promoted to lieutenant the following year, and was present at the Battle of Navarino, in 1827, as second lieutenant of the *Talbot*.

Soon after his marriage, in 1837, he was appointed first lieutenant of the *Excellent*, the recently established Gunnery School of the Navy, from which ship he was promoted to Commander in 1840, at sixteen years' seniority and at forty-two years of age. After a short service afloat as second in command and undergoing a course of instruction in mathematics and steam at the Portsmouth Naval College, he was given the command of the *Pilot* on the East Indies Station, and on paying her off was promoted to Captain on the 15th of February, 1848.

He seems to have been a man of high character and ability, and possessing accomplishments above the average, well acquainted with French and German, and a skilful amateur in water colours, but for the next nine years he could not obtain any employment in his profession.

In some autobiographical notes written at a later date, he reproaches himself with not having devoted

more time and attention to his profession, but he also records an incident which is probably significant of the reasons for his slow advance. He states "whilst first lieutenant of the *Scylla* in 1833 our Commander was promoted, and his successor was the Hon. George Grey, who in the *Talbot* had been one of the younger midshipmen when I was first lieutenant, but these changes are common enough in our service and I believe in every other." The lists were very congested in those days, and family influence largely dictated the promotions.

Mrs. Wilson was the daughter of the Rev. William Yonge, Chancellor of Norwich, and for sixty-five years Vicar of Swaffham. She had several sisters, of whom one, Mrs. Dowell, was the mother of Admiral Sir William Dowell, who is occasionally mentioned in the following pages. Another was Mrs. Pyke, one of whose daughters married her cousin, the above-mentioned William Dowell, and the other another naval officer, Arthur Thrupp, who subsequently became a Rear-Admiral. This family was also connected with that of Nelson by the marriage of Miss Yonge, the Chancellor's sister, with the Rev. William Nelson, Rector of Hillborough, brother of Horatio the Admiral, and after his death created Earl Nelson.

A sailor's wife has an uncommon responsibility towards her children through the separation from her husband for long periods whilst he is serving at sea, often in distant waters, with only few and slow opportunities for communication; but whatever difficulties Mrs. Wilson encountered in the bringing up of her children, she appears to have surmounted them admirably, for her husband on his return from abroad found "she has done ample justice to the children in the matter of preliminary instruction," and they remained devoted to her throughout a long life. She has been described by one of them as "a saint with personal beauty which lasted to the day of her death

at the age of eighty-three. She was a loving but not indulgent mother, always doing all she possibly could for the Church and the poor."

On the return from the East Indies, Knyvet Wilson found himself on half-pay with a family of five children to be educated, but his standard was a high one.

The two elder boys were sent to Eton, where they soon succeeded in winning scholarships, and in order to be near them the family moved from Swaffham, first to Eton and afterwards to Windsor. At the age of ten, Arthur, having failed for a scholarship, was sent to Eton as a day-boy, and on the 4th of December, 1852, we get the first measure of his abilities in a letter to his father from Dr. Goodford, his tutor:

"Of your three boys the elder has deserved by his regular and steady application as good a report as I can give him. The minor, with a good deal of irregularity and a good deal of absence from health, has still done well enough to be sent up for good, and maintained his position within a very little. The minimus is certainly not so quick as his brothers, but he plods away with a fair share of determination, and may, I hope, do well."

With the outbreak of war with Russia, in 1854, the prospects of employment in the Navy were looking up, and it may be that the call of the sea was exercising an influence on both father and son, for after two years at Eton, a period long enough to create an enduring recollection and to establish a claim to "have been at Eton," a fact of which he was always very proud in after years, Arthur was withdrawn, and after a short spell of coaching under his father, was sent up for the examination at Portsmouth for entry as a naval cadet. He reported the result in a letter to his mother on the 11th of June, 1855, from Windsor:

". . . At 9 o'clock I had to go to the College to hear whether I had passed or not, and I am happy to say I have, though it was last but one, and the examiner told me there was one mistake in the dictation. We

then had to go to the Admiral's Office and wait for about half an hour, and then to go on board the *Victory* to have our names put down and get a fortnight's leave, and after that, as it was about half-past ten, to go and get my clothes from Mr. Walton's and be about half a minute late for the train, so that we had to wait three-quarters of an hour for the next one, which was a horrid slow one, and did not get to London till five, and I did not get here till five minutes to seven. . . ."

He joined the *Victory* on the 29th of June, 1855, and, in a few letters home, related how he "got a sort of supper off water, ship's biscuit, and the *Illustrated*. At nine o'clock we were all driven off to bed without being allowed to "read to a stop," and again, "the head of our mess is the second Master, and is at the present moment Commanding Officer, although there ought to be three lieutenants on board. I get him to tell me the names of all the ropes, etc., whenever I can catch him on deck."

On the 9th of July, the *Powerful* called at Spithead, and Arthur, with other supernumeraries, was sent to her for passage to the Black Sea. After a bad landfall, and having to beat to windward up the Malta Channel, the *Powerful* arrived at Malta on the 7th of August, and the same afternoon Arthur was transferred to the *Himalaya*, a troopship, and proceeded to the Black Sea

Writing on the 17th of August to his father, he says:

". . . We reached Balaclava on Tuesday, and on Wednesday we cruised about all day in hopes of getting a tug to tow us into harbour, but without succeeding. The next morning we were ordered to get under weigh and cruise about again, and about nine o'clock the tug came out and towed us in, and I never saw such a beastly little hole as it is in all my life . . . about as broad as the river at home, with ships two deep on each side of it, so you may imagine it was rather hard work to get a vessel about half as long again as the *Royal Albert* into it. However, we did it at last, with only carrying away one bowsprit, and knocking a man overboard. In the afternoon we

were packed off on board the *Sphinx* for a passage to the *Royal Albert*, and this morning we were all disposed of. I was appointed to the *Algiers*. . . ."

The operations in the Crimea were by this time rapidly approaching a climax, preparations were being made for a final assault by the troops, and though the Fleet was in readiness to take a hand in the fighting if necessary, neither the need nor the opportunity arose. Writing home on the 9th of September from off Sebastopol, he says:

". . . Yesterday afternoon, while we were at gun drill, we were surprised by hearing a great deal of firing, so we all rushed on the poop to see what it was, and all we saw was a row of some sort or other close to the Malakoff, and we could not tell whether the French had stormed the Malakoff, or the Russians had made a sortie on the French, until about three hours afterwards, when we saw the French flag flying on the Malakoff. A short time afterwards we saw some men, it was too far off to make out who, make an attack on the Horseshoe Battery which is behind the Malakoff. We saw some of them leap into the ditch, and then there was a large explosion, and the next thing we saw of them was running with all their might towards their own works. This morning it was very foggy, so that we could see nothing, but we heard five or six large explosions, which made us suppose something was in the wind, though we could not tell what. However, about six o'clock the fog began to clear away, and we were surprised to see no ships in the harbour except five small steamers, although the evening before we left one three-decker and four two-deckers, besides several frigates, were there, and a little time afterwards we saw flames rushing out of Fort Nicholas, and about seven o'clock the mastheads of all the ships just sticking out of the water, which plainly showed us their fate. About eight o'clock we saw the Russians running across the bridge to the North side; since that there has been an explosion every half-hour or so. . . . In the afternoon there was a glorious explosion, as a sort of finale to the fireworks. It was, we think, a magazine of shells thrown up in the air, which had a splendid effect. . . ."

The next active operation was the bombardment of Kinburn, in October, interesting from the fact that it was the first occasion in which ironclad ships were used. On the 6th of November he reports from off Sebastopol again:

". . . I went ashore at Kinburn the day after our grand twenty minutes' action. . . . The place is fearfully knocked about; there is scarcely a gun whole in the place, except in a battery at the end of the spit, which is made of wood with about six feet of earth over it. . . ."

Shortly after this, the *Algiers* proceeded to Malta to refit, and in March, 1856, returned to England, when, after serving for a week in the *Rodney* under his father, Arthur was appointed to the *Colossus*, under Harry Keppel, who was a relative of the family. In the course of a short trip to the Crimea and back, the *Colossus* met the *Rodney* at sea, and Keppel displayed his originality and kind thought for father and son, by sending Arthur up into the mizzen rigging, so that his father should see him as the two ships passed each other, signalling, at the same time, "Boy good and well."

But Arthur did not return home in the *Colossus*. It is related, that at Balaclava, he was asked by a military officer who had lost a dog, to go on shore and look for it, which he did, and having found the dog, returned to the beach to find his ship had sailed in the meantime with all his belongings.

He was soon sent home in another ship, and Keppel, having been appointed to the command of the *Raleigh*, with orders to fly a Commodore's broad pendant, took Arthur with him. It was a very satisfactory appointment, for Keppel was getting together an excellent body of officers; he had a great reputation as a bold and dashing officer, and as the ship was destined for the China Station, there was a good prospect of her seeing active service.

Continuous service for the men had not then been

introduced, and a ship's company had not only to be collected, but the ship had to be rigged and fitted out with guns, ammunition, stores and provisions, all of which, incidentally, was a capital experience for a junior midshipman. He describes these circumstances in a letter to his father:

". . . We have got about 200 hands altogether now on the ship's books, but a great many of them are on leave. The *Shannon* set up an opposition shop, so we may not ship hands quite so fast, and some of them may be frightened from coming as we have got on the papers, 'None but the right sort need apply,' so the right sort has become a regular nickname for all the Raleighs. . . . The gunroom seems to have been fitted up last commission splendidly, as it is all blue and gilt all round. We have gammoned the bowsprit and all the mizzen shrouds are over, and two pairs of the fore and main. . . ."

The *Shannon* evidently secured her share of the right sort, for she was the ship that furnished the Naval Brigade which subsequently so distinguished itself in the Indian Mutiny.

The first place the *Raleigh* called at, on her way out to her station, was Madeira, which she reached on the 8th of December, 1856. The bright sunshine and clear waters of the anchorage, the fine scenery of the island, the quaint buildings and streets of Funchal, and the gaily-painted bumboats, with their stores of bananas and oranges, afford a striking and pleasant change from the winter gales and rough seas of our own climate. It was a new experience, and in company with Mr. Goodenough[1] and others, Arthur rode out for a picnic in the Grand Corral, a well-known and beautiful gorge in the mountains.

The voyage to the Cape, and from there to Penang, seems to have passed without unusual incident, except that on the latter part "we caught three sharks at

[1] Lieutenant James G. Goodenough, First Lieutenant, afterwards Commodore, Australian Station.

different times, and I do not know whether it was being on salt provisions or what, but it seemed to me as good a fish as I ever tasted; at all events, I made a very good breakfast off it."

Whilst proceeding to join the Commander-in-Chief at Hong Kong, the *Raleigh*, on the 15th of March, struck a submerged rock outside Macao, and had to be beached to save her from sinking. The place selected for this proved unfortunately to be soft mud, into which she soon sank beyond hope of recovery. The officers and ship's company were landed, and after three days, Arthur was sent on to Hong Kong with a large party of them, where he was ordered to join the *Calcutta*, the flagship of Sir Michael Seymour, the Commander-in-Chief of the station. He had saved his clothes, but had lost his dirk and telescope.

Our relations with China at this time were little short of open war. In the previous year a vessel named the *Arrow*, flying British colours, had been boarded by the Cantonese authorities, and had had twelve men taken out of her on the ground that the vessel was a pirate. After a vigorous protest the men were delivered up, but all reparation or apology was refused. In October and November Canton was bombarded and seized by a joint force of British and French, the Chinese retaliating by offering a reward for all British heads. An expedition was fitted out in England and despatched under Lord Elgin to exact redress, and was on its way when the Indian Mutiny broke out on the 10th of May, 1857. The troops were at once diverted to aid our small force in India, and the settlement of our dispute with China had to stand over for a time.

Throughout the long hot summer the flagship remained at Hong Kong. The patrol of the river, and the maintenance of our positions towards Canton, necessitated constant vigilance and much hard work, with frequent small encounters with junks. On the 1st of June, a large fleet of mandarin junks was

destroyed in Patshan Creek, an operation which was only completed after some very severe fighting, in which the Commodore and his old Raleighs were well to the fore, but, much to his disappointment, Arthur was kept on board the flagship at Hong Kong, and took no part in the operation. "Captain Hall takes too much care of youngsters altogether" is his indignant comment on this restraint of his wishes. He was only fifteen, and Captain King Hall's feelings about him can be appreciated from the following letter which he wrote to his father:

"My dear Wilson, I have much pleasure in being or trying to be as kind to your good boy as you were to me, twenty-seven years ago. . . . He is a very good lad, in the signals, and has many companions of equally as good a stamp, very attentive to his duty, this will please you, and both his mother and yourself may rest assured I will do all I can for him. . . . Believe me with good wishes, your sincere friend, W. King Hall."

Commodore Keppel, too, was not forgetful of him, for Arthur, writing to his father, says:

". . . The Commodore was very kind to me before he went home, he told me to write to him if ever I wanted anything, and promised to look after me if he got a station. . . ."

So Arthur was evidently not wanting in good friends.

A good many changes took place in the flagship about this time, consequent on promotion and vacancies in other ships, so that in October, there were only two of the lieutenants remaining of those in her when he joined, and these two were about to go; but amongst the newcomers was Goodenough as Gunnery Lieutenant, and we learn that—

". . . he is going to ask the Captain to let me go with him in charge of a field gun. . . . I am learning the field-piece drill, so that they shall have no excuse for not letting me go. . . ."

After some weeks' abortive negotiations with the Chinese, trying to come to terms, plans were made for an attack on Canton. In November Arthur was stationed to a field gun—

". . . one out of five field-pieces, it is a 12-pounder belonging to the East India service, but it is a little bit of a thing that two men can lift easily. We go ashore about twice a week to exercise them, which is very good fun, but the little things seem as if they were made to turn over. Whenever we come to a rough place at all, they are sure to capsize. I am afraid it is not at all certain whether I shall go up with it to Canton, as Captain Hall seems to have a horror of taking any youngsters up with him. . . ."

However, the expedition started up the river in December, and he was at last gratified by going with it, and on the 12th of January, 1858, sent home the following account to his father:

". . . We had splendid fun at Canton, but unfortunately I got very little fighting. I will only tell you the part that concerns myself, as you will hear all the rest from the newspapers. On Monday, after breakfast, we had about five hours' waiting fully accoutred (which means a clean shirt, towel, comb, pair of socks, and a piece of soap, rolled up in a blanket, and strapped on the back with canvas straps, with three days' provisions, a water bottle made of bamboo, and dirk and pistol), waiting for a gunboat to take us down to French Folly, but at last, at about 1 o'clock, the *Firm* came and we embarked, but had not moved 50 yards when she got on shore, and as the tide was ebbing fast, there was no chance of getting off again that tide, so we shifted into the *Woodcock*, but she got ashore also when we had gone about a mile, and so we had to go on in the boats and got ashore about 4 o'clock, and went through paddy fields and over ridges, the field-pieces capsizing about every 100 yards, till at last we came to a halt in a graveyard, and made ourselves as comfortable as possible for the night. Three or four of us laid down in a grave and spread our blankets over us, but there was no wood to be got

to make fires, so, of course, we were not over warm, though, notwithstanding, we managed to sleep pretty well. The Chinese fired at us a good deal all night, but all the shots passed over us, so they did no harm. We were on the march at daylight, and had even worse ground than ever to go over, and, to make matters worse, Captain Key sent us the wrong way, and at last one of the field-pieces, going down from higher ground into a paddy field, had a drop of about 6 feet and sank into the mud above the axle-trees, and I had to stop by this one while Mr. Goodenough went on with the other two. However, we got out at last, and got on the walls, where we met the Commodore, and he stopped us to fire upon Gough's Fort under the charge of an artillery officer, so he put the gun on a platform, and he said there was no chance of the recoil sending it off, so we fired, and the shot went nearly half-way, and the gun recoiled back over the parapet and pitched bottom-up 6 feet off. We had just got it up again and were going to lash the wheels, when a message came to say we were wanted further on, so we went on to a round earth battery, that we have christened Sailor's Fort, to fire among the Chinamen who were collecting among the houses with their jingals and firing at us, and then I went down and joined Mr. Goodenough at the North Gate, and I met William Dowell there, but I could not talk to him much as he was surrounded by Post-Captains and Commanders. They were firing at us all the afternoon, but somehow or other did not hit anybody. In the evening we got a little room for one of the field-piece crews, and Mr. Goodenough and myself, and we were just cooking some tea and fowls we had caught, when Captain McClure came in and said we must clear out of it as he wanted it for the Guard, and of course it was too late to get another room, so the field-piece crew had to sleep in the open air again, but Mr. Goodenough got leave for himself and me to sleep there. They fired a few rockets at us, but Chinese rockets are only arrows about 7 feet long and have no effect on brick walls, so they did no harm. The next day we shifted into a house near Sailor's Fort, where we lived till we came down to the ship again, last Wednesday. . . . I got a good look at Governor Yeh, and shall know him again in case he escapes. I hope we shall have the pleasure of taking

him up to the Northward. He is the biggest Chinaman I ever saw, and I think he is larger round than the old Provost at Eton. . . ."[1]

Rather a long account of a small boy's doings, but it rings true. No complaints of hardships or difficulties, they were taken as part of the game. The next letter is to his mother, a week later:

". . . But I have got to tell you of a more serious matter. There is to be a confirmation here next Sunday, and I have made up my mind to be confirmed, as it is doubtful whether I should be able to be if I waited till I got home to England. It is a pity they have not given us longer warning. . . ."

Again, to his sister, on 14th of March, 1858:

". . . This station seems to agree with me wonderfully. I never was in better health in my life. But it does not make me grow. I measured myself this morning, and I was only 5 feet 1 inch. . . ."

The flagship now left Hong Kong for the North, and after touching at one or two ports on the coast, arrived off the mouth of the Peiho River, where the Chinese were refusing any further advance of Lord Elgin's mission to Peking. A note in Arthur's official record states that he was landed for the attack on the forts, that was made to force a passage, but there are no letters of his of the period now to be found.

The flagship arrived at Hong Kong in October, and remained there all the winter. Hostilities were over for a time, and the midshipmen had a comparatively easy time. Wilson and Rawson[2] were given leave to stay with friends on shore, where they had the run of some ponies training on the racecourse; there were cricket matches and theatricals, but the principal amusement was bathing.

One of them, now Admiral Sir Thomas Jackson, has kindly furnished some recollections of these happy days, from which the following extracts are taken:

[1] Provost Hodgson.
[2] Afterwards Admiral Sir Harry Rawson.

"We were great pals, and always in the same scrapes. On one occasion I had been reported by Laughton for some crime of which Wilson was certainly more guilty than I was. The Commander put me in watch and watch. Wilson went to him and confessed that he was the guilty one. 'I thought it very odd that you weren't both in it,' said Goodenough, 'so you can go into watch and watch and relieve Jackson.' Wilson was a tough youngster. He had a hard head, and would allow any of us to hit him fairly on the top thereof with our knuckles, convinced, as he said, that it would hurt us more than it did him. He had a great dislike of sick people. Once when I was confined to my hammock and wanted him to come and talk to me, 'Ugh,' said Wilson, and departed up the cockpit ladder. Yet I was only suffering from bruises from having fallen down in the hold.

"The Jardines were very kind to us, and used to lend us one of their yachts. One day Edward Seymour,[1] Wilson, and I were out in the *Heatherbell*, a schooner, when we said we would exercise man overboard. We tossed up who should go overboard, with the result that Seymour and I were to go, and Wilson was to pick us up. We two stripped, and, in spite of the remonstrances of the Chinese coxswain, jumped over. The coxswain immediately hove us the end of the main-sheet, which we got hold of, but Wilson wouldn't heave to, saying it wasn't the game to be saved in that way. So at last we had to let go, when Wilson brought the yacht to the wind, made a tack, and picked us up in a seamanlike manner."

Hitherto he had been employed as a signal midshipman, a duty from which he had made several applications to be moved, but without success, being told he was too useful there, but he now wrote:

". . . They have given me the second cutter, which is a very pleasant change from watch keeping, as I never get tired of sailing about in a boat, though I am away for about seven or eight hours a day generally. . . ."

In January, 1859, the *Calcutta* received orders to return home. Leaving Hong Kong in the middle of

[1] Now Admiral of the Fleet Sir Edward Seymour, G.C.B., O.M.

March, and being towed by a steamship through the narrow waters from Singapore to Sunda, she reached the Cape in May without any incident calling for notice, and on continuing her voyage touched for a day at St. Helena.

Situated in the heart of the South-East trade-winds, and in the direct track of homeward-bound ships, this small island, with its varied scenery and its legends of Napoleon, was always a favourite port of call for passing ships and whalers. It was a prosperous little place until the traffic to the East became diverted to the shorter route through the Suez Canal, and visitors could enjoy a pleasant break in their long sea voyage by an excursion round the interior. The *Calcutta* only remained one day, which Wilson spent as described in the following letter:

". . . Rawson and I started at six o'clock in the morning, so as to make the most of our time, and also to be able to get horses, as we wanted to ride all over the island, and we thought all the horses might be engaged if we went later. However, there were lots of horses, and we started off full speed for the town. . . . We did not know our way, but we knew somewhere about which part of the island Longwood was, so we trusted to chance pretty well to find our way. . . . We had been riding about an hour and a half, and, as we had had no breakfast, we were wishing we could pass some inn where we could get some, when a little boy sung out, "Come in here." We asked, "Why, what's there?" without stopping, so he sung out, "Ham and eggs!" at the top of his voice, which stopped us immediately; so we tied up our horses, and ordered the ham and eggs at once. While we were waiting for the breakfast, we found out that Napoleon's tomb was at the bottom of the valley close to, so we went down to look at it. However, there was nothing but a hole with an old shed over it, and some railings round it. When we got up we found three more of our fellows had arrived, so they went down to look at the grave, and then joined us in our attack on the ham and eggs. After breakfast we all started off at full speed for Longwood, which was about a mile and a half off, and

had a splendid gallop along a grass walk about a quarter of a mile long going up to the house. . . . After leaving Longwood we went for a gallop across country as hard as we could, but my horse suddenly bolted with me down a hill, turning sharp off at right angles, and, as a natural consequence, I flew off at a tangent, but I pitched on my feet luckily, so no harm was done beyond my getting chaffed considerably, and nearly bringing another fellow off laughing at me. As we were coming back we charged at full gallop past the Captain before we saw him, and nearly ran over him, as he had to jump on one side out of the way. Of course, we pulled up immediately, and touched our caps. However, he only roared out something about breaking our necks if we did not look out. When we got back to Jamestown, we had a second breakfast, which we had ordered before starting; as it was about one o'clock, it answered the purpose of dinner. . . . As Rawson had to go off, I went with Kennedy,[1] one of our lieutenants, who was midshipman with me in the *Algiers* and this ship too, up a hill called Ladder Hill, from having a ladder straight up the side to get up by. It is 600 feet high, and just like a ship's ladder, about two feet broad, and fastened with iron clamps to the rock. We counted 665 steps in it. . . . We stopped up there about twenty minutes to get our breath, and then ran down the ladder at full speed. It took us about two minutes to get down, although it took us nearly a quarter of an hour to go up. . . . We got on board again just before four o'clock, and I had to take some ladies on shore as soon as I got on board. The instant I got back, we weighed, and went right away before the wind for England."

During the passage home, his thoughts were much occupied with the prospect of an approaching examination, and he worked diligently with others at the College sheets—*i.e.*, the papers of former examinations, for he wrote:

". . . The unfortunate wretches that have got to pass, five yearly, when we get home, are in a fearful state, and are working as if for their lives, though I very much doubt about their passing, as our naval

[1] Afterwards Admiral Sir William R. Kennedy.

instructor has been ill ever since we have been at sea. . . ."

On the 13th of June, the day arrived, and, after what seems to have been a fairly thorough test, the Captain had him up, and though he "seemed in a very bad temper, passed me all right, and put 'satisfactory' on the certificate!"

The *Calcutta* was paid off at Devonport, on the 13th of August, after a commission of three years and nine months, during which her officers and ship's company had performed much hard and active service, and there had been established that strong feeling of *esprit de corps* which always exists in a well-disciplined and happy ship, and which, in this instance, long remained a bond of sympathy between those who had served in her. In writing of her many years afterwards, Admiral of the Fleet Sir Edward Seymour says in his book, "My Naval Career and Travels," that "her midshipmen, generally, were more successful in the service than those of any other ship I ever heard of. About seventeen got on to the active list of Captains, and at least eight on to the Flag (or Admiral's) list. . . . What was this due to? I will not pronounce, but our Captain, King Hall, took a real interest in his youngsters, who also had the benefit of a first-rate naval instructor in the present Professor Sir John Laughton. . . ."

She was eminently a first-rate school for youngsters.

After six weeks' leave, mostly spent with his family at Dieppe, Arthur was appointed to the *Topaze*, a steam frigate commanded by Captain the Hon. John Spencer, and bound for the Pacific.

She sailed from Plymouth in the middle of October, and on reaching the trade-winds, Arthur was made mate of the upper deck, and put on to keep the four to six watch, much to his satisfaction. She touched at Madeira, Teneriffe, and Rio de Janeiro, where he notes having to coal ship in her own boats. She then proceeded through the Magellan Straits, and after some

delay there, caused by a succession of heavy gales, reached Valparaiso early in January. He describes the ship's company as the worst he ever saw. The gunroom had been broken into, and his money stolen; stealing and desertion were very common, but they were improving gradually.

The ship was ordered North, and on the passage to Honolulu, one night, in the middle watch, a man fell overboard. There are few incidents which call for more prompt action and resourcefulness than the rescue of a man who has fallen overboard at sea, and though the conditions in this instance were in some respects favourable, the case was not without its difficulties, as appears in the following account taken from Arthur's diary:

". . . I was in my hammock at the time, but I succeeded in getting up just as they were lowering the lifeboat, and slipped down the life-line into her. We were running about 6 knots before the wind when he fell, and the ropes were coiled up, so it was some time before she was rounded to, and the man was a little more than a mile off, and of course the lifebuoy did not light, so I guessed the way by getting my handkerchief out and steering nearly head to wind by it, and luckily it was a moonlight night or we should have had a long hunt for him. . . ."

From Honolulu the ship went on to Esquimalt, the headquarters of the station. The passage out had afforded Arthur some experience, but he was soon to find that life in the Pacific was a dull business compared to that he had led in China. Ships remained for months at a time in harbour without even going to sea for a day's target practice. There was, therefore, nothing unusual about the fact that the *Topaze* remained at Esquimalt for over twelve months; but it was a galling experience for an ardent young spirit like Arthur, and he expresses himself freely on the subject in his letters of this time. He describes Esquimalt as "a very pretty harbour surrounded by

pine forests, and about half a dozen houses showing amongst the trees in different places." Victoria, about three miles off, was reached by "a very nice walk through the forest, but Victoria itself was a strange-looking place—it gives one the idea of a bazaar or something of that sort; all the houses are of wood and evidently knocked up in a hurry."

The monotony of harbour drills and exercises was relieved by some hard work on the salvage of a wreck in an exposed position in mid-winter, but what he felt most was the want of opportunity to get in the prescribed list of observations of the sun, moon, and stars, that was required before he could present himself for examination. This would have been a simple matter at sea, but in harbour could only be taken with an artificial horizon on shore. He tried to soften the Captain's heart about it, but the Captain was inflexible: "The Circular says they are to be taken, so they must be." He could not forbear remarking to his father: "I suppose the Admiralty did not allow for the possibility of a ship being perfectly idle for six months."

The regulations of the day allowed him a choice of presenting himself for examination as soon as he was nineteen, or of taking an easier examination after he had completed six years' service, which he would do on the 11th of June. As there was three months' time to be gained under the former rule, he chose it, and presented himself accordingly on the 4th of March. He came through it very well and was given a first-class certificate, but was very modest about it in the account he sent his father.

He continued in the *Topaze* as acting sub-lieutenant, and after a further uneventful period of more than two and a half years, varied only by an annual cruise to Valparaiso, Callao, and Panama, the ship sailed for England. A vacancy for a lieutenant having occurred on the passage home, he was appointed to fill it, and was an acting lieutenant when the ship was paid off in December, 1863.

The commission had not afforded him much practical experience at sea, but it had not been a bad school for patience and self-reliance. The discipline appears to have been good after the first few months; she was a comfortable ship, and in one respect Arthur was more fortunate than many another youngster in having the advantage of a naval instructor to direct and assist him in his mathematical studies.

He had made good use of these opportunities, and was well prepared for the two remaining examinations he was required to pass to qualify for lieutenant; but he took no risks, for after only three days' leave at home, he went to the College at Portsmouth to get a final polish up before presenting himself for examination. On the 15th of January he wrote to his brother Roland:

". . . I have been advised to stop here for a month after I pass the *Excellent*, before going in for the College examination, in order to try for the Beaufort Testimonial, which is a prize given to the one who passes the best examination for lieutenant at the College in the year; but I think I shall have a better chance of getting my time back if I join the first examination day. Of course, I try for the Beaufort all the same, but it would be with a much greater chance of success if I waited a month or two to work up, as everyone is allowed their choice of three months to go up in, and, of course, some of my opponents will take the whole three months, so I shall be working at a disadvantage. . . ."

Promotion was the greater prize of the two, but the date from which it was to count was an arbitrary matter, in which an early pass would be a favourable argument. He obtained 932 marks out of 1,000 in "Navigation" (the College examination), and having previously got his "First" in Gunnery, he thus gained the coveted distinction of "Three Ones," and in consideration of the creditable manner he had passed, his seniority was dated back to the 11th of December, 1861.

The two elder brothers had gained scholarships at Eton; William was now a Senior Optime, Chancellor's Medallist, and a Fellow of Trinity College, Cambridge; Roland had won the Newcastle Scholarship at Eton, had entered King's College, had won the Craven Scholarship, and was Senior Classic in 1863; and Arthur was a lieutenant in the Royal Navy before he was twenty years of age. A brilliant family record.

CHAPTER II

LIEUTENANT: "GLADIATOR," "EXCELLENT," MISSION TO JAPAN, "BRITANNIA," "CALEDONIA," AND "NARCISSUS" (1864–1873)

IMMEDIATELY after his promotion, Wilson was appointed to the *Gladiator*, a paddle frigate, employed on particular service—that is, under the direct orders of the Admiralty to transport troops or stores, search for a wreck, tow home a disabled ship, or to execute any other duty in an emergency which, in the absence of any other means, was imposed on the Navy. It was a service out of the beaten track, and not a very popular one, but it gave him the opportunities to get home on leave, which were welcome after so long abroad. They were a very united family, and Arthur's admiration for his two brothers shines out very clearly in his letters; when therefore the news of William's death was received, it came as a great shock. He was killed by a fall on the Riffelhorn, in Switzerland, in July, 1865.

After completing two years' service as a watch-keeper, he joined the *Excellent* in April, 1866, to qualify for gunnery lieutenant, meeting again his two old friends, Rawson and Jackson, who had been with him in the *Calcutta*, also one with whom he was to be very closely associated later in his career, John Arbuthnot Fisher, then a junior staff officer.

A series of events had occurred in Japan in the course of recent years, which led that country to abandon its previous policy of excluding all foreign intercourse, and, among other consequent changes, to cultivate a more adequate means of preserving her independence and integrity than she had hitherto

possessed. To this end she had sought the assistance of the British Government, asking it to lend the services of a small number of naval officers to act as instructors to her young officers. With the consent of the Admiralty, Wilson accepted an invitation to act as one of these under Commander Tracey,[1] who was to be in charge of the mission, which comprised in addition a Staff Commander, a Chief Engineer, and one or two petty officers.

The mission embarked in the *Rodney*, and left England in May, 1867. They had a long passage out, and as Wilson had no duty to do, he was hard put to it to find an occupation. The obvious one, the study of Japanese, was found quite hopeless, for there was no such thing as a grammar to be had. Hong Kong was reached at last, and having completed the final stage of their journey in a mail steamer, Tracey and Wilson arrived at Yokohama on the 23rd of October.

Their future residence and the buildings for the new school had been got ready for them at Yedo, the seat of the Tycoon's Government, now known by the name of Tokyo. After a few days spent in completing their household equipment, they took up their quarters there on the 1st of November, getting at once into direct communication with the Japanese authorities, making the acquaintance of those who were to be responsible for the administration of the Navy, learning their views, and putting forward their own proposals. Wilson describes the place as situated "just outside the ground set apart for the Foreign Settlement when the city is opened on the 1st of January," and quite suitable, but there was still the language difficulty. Interpreters were available for official visits and conferences, but when the school was to be opened "our great want will be interpreters, for there seem hardly any to be got; we can only get a promise of one Japanese one to assist us, and they

[1] Afterwards Admiral Sir Richard Tracey.

talk of giving us about a hundred pupils." So they all pegged away to learn the language, and Wilson proceeded to translate a book, with the aid of a dictionary and a Japanese master who knew no English.

There was plenty of hard work to be done; but life in Yedo in those days was not wanting in excitements, for although the officers of the new school were the invited guests of the country, the state of public feeling was such that their quarters had to be protected, and they had to be accompanied by a guard on any of their expeditions outside. Japan was in the throes of a revolution, the long usurped power of the Tycoon was fast waning, and the Mikado was without adequate means to control the great daimios, the feudal lords of the kingdom. There was still a strong feeling of hostility to all foreigners among an unruly section of the community, and it seemed that at any moment some unforeseen event might occur which would precipitate these forces beyond control.

Social amenities were not wanting, for besides the Japanese official entertainments, which appear to have been frequent, there was a small foreign society composed of the Legations of the United States and of the Western Powers, and of a few favoured individuals who had succeeded in entering the city, among whom Wilson found an old Eton schoolfellow in Captain Buckle, afterwards the correspondent of *The Times*, and for many years the editor of the *Japan Mail*. The arrival of the *Rodney* at Yokohama soon afterwards, with the Commander-in-Chief, Sir Harry Keppel, was a further occasion for the exchange of hospitalities. There were the officers to be shown round this strange city of lath-and-paper houses, of picturesque temples and beautiful gardens, and there was the new school to be shown to the Admiral, who expressed his pleasure and surprise at the progress it had made, and was "exceedingly amiable and jolly."

The progress of Japan is now ancient history; she is one of the great Naval Powers of the world. But in

view of what shortly occurred, it would be idle to describe further the proceedings of the small mission, or to estimate what influence it had on its pupils. It will suffice to say that the school opened on the 1st of January, 1868, with a class of sixty-three lads, ranging in age from fourteen to seventeen, to be trained as officers. Three weeks afterwards a riot broke out in Yedo between Satsuma's men and their opponents; Satsuma's Yoshki was burned, and the two small vessels, lent for instructional purposes, went off to join in the fight with a Satsuma steamer in the bay. Order was soon restored, and there was a period of quiet, until, on the 5th of March, a letter was received from the British Minister informing Captain Tracey that war had been declared between the Tycoon and the Mikado, and enjoining a strict neutrality on all British subjects. The Japanese authorities had consequently to be informed that the mission could no longer continue its instruction, and the whole party withdrew to Yokohama.

It was a great disappointment, after all their efforts, to have their budding success so suddenly destroyed; but though the struggle between the two Japanese parties was bitter, they were agreed in their insistence on freedom from foreign interference whilst they fought it out.

The months passed by without any change in these conditions. Wilson diligently continued his study of the language, paid an occasional visit to Yedo with Mr. Satow,[1] studied the politics and movements of the two parties, played cricket and racquets, and rode about the surrounding country, to Kamekura, and to the great bronze figure of Buddha, known as Daibutz.

The Legation had moved down to Yokohama, and in a letter of this period Wilson writes:

". . . Last week I got a note from Sir Harry Parkes at five minutes to nine, asking me to be at the landing-

[1] Afterwards Sir Ernest Satow, Minister at Tokyo, 1895.

place at nine o'clock, ready to go to Yedo with him; however, knowing the man's peculiarities, I got my breakfast in comfort, and then went down with half an hour to spare. I was in hopes the trip had some reference to our business, but I found he only wanted me to assist him in showing the lions to a picnic party he had got up. I don't know whether I ever described Sir Harry Parkes: he is a most extraordinary little man, I suppose really about forty years old, but he looks between twenty-five and thirty, very neat, with slightly reddish hair and whiskers, and is the most absolutely indefatigable man I ever saw, but always having twice as much to do as he has time for; he is always an hour or two behind time, but as he has no appreciation whatever of the value of either meal hours or sleep, he gets through it all somehow or other, and he has a most charming wife to do the social part of the business for him."

This excursion gave rise to another, for one of Parkes's guests was a Mr. Shaw, an ex-Senator in the United States, who was very desirous to see something of the country—

". . . so I offered to pilot him for a cruise. . . . The principal excursion was to Kamekura and Daibutz, but from there we went on to a charming little island, close to the coast, which can be reached at low tide by a spit of sand. It is a steep little island about half a mile in diameter, with temples stuck about in every little nook and corner in it. The Japanese make pilgrimages there from all sorts of places, the principal object of which is to eat raw fish. It is a peculiar sort of fish, which they cut in very thin slices and serve up with some sort of sauce over it. It is considered a great delicacy. I have tried it and did not find it bad, but the idea is not nice. Besides the temples, there is a cave in the island, with two or three branches which run back about 100 or 150 yards into the rock; the sea runs about 30 yards or so into the cave, but in fine weather you can get in along a ledge by the side of it. There are all sorts of sea monsters made of bronze along the sides of the cave, and at the end of the two branches we followed, altars with more beasts on them. I had been to Kamekura before . . . but

this time we explored it carefully. Up to the time of Tycho Same (which was, I believe, in the sixteenth century), the officer who held the rank of Tai Sho lived at Kamekura, and held very much the same position that the Tycoons afterwards did at Yedo, and now there is a large collection of temples at Kamekura in which relics of these old Tai Shos are preserved. . . . The relics generally consist of swords, spears, arrows, etc., a helmet, and sometimes pieces of chain armour. . . ."

Tracey had gone off in July for a trip to the Amur in the flagship, and on his return there was a consultation held, at which it was decided to inform the Japanese Minister that, if there was no prospect of the school being reopened, the mission desired to return to England. At the same time, the Japanese wrote to Sir Harry Parkes to express their regret that, owing to the disturbed state of the country, they were unable to make further use of their services, and to ask him to make what arrangements he thought fit for their return.

Thus ended the mission, and Wilson, in his last letter from Japan, dated 19th of September, concludes:

". . . I am afraid my Japanese is not likely to be much good to me any more, but I don't regret having gone in for it, as it has added immensely to the enjoyment of the time here, especially the last six months, and altogether it has been the most delightful year I have ever spent. . . ."

Tracey and he travelled home together, and arrived in England in December. It had been an interesting experience, and though it came to an early and untimely end, Wilson's services were not forgotten, for in later years no Japanese naval officer ever missed an opportunity to pay his respects to him as one of their early instructors.

On the 1st of January, 1869, Wilson was appointed to the *Britannia* as first lieutenant. It was a very

unusual appointment for a gunnery lieutenant, as there are no gunnery duties to be carried out in such harbour training ships; possibly his recent service as an instructing officer in Japan was thought to qualify him specially for such a post, and to enable precedents to be overridden; but whatever the reason for this exception, he threw himself with his usual zeal into the education of the young cadets. The discipline of the establishment is said to have been already strict, but he improved it by the introduction of an "Habitual Offenders List," and at the same time, he created quite a new departure by personally taking part in the cricket, football, and other games of the boys, considering it to be as much a part of his duty to do so as anything else, though it had never been customary among the lieutenants before.

He continued there for a year, and established between himself and many of the youngsters under him, a mutual feeling of regard and friendship, which he, on his side, would occasionally display long afterwards, when his pupils had become Captains, by some small favouritism or unusual consideration towards "one of his *Britannia* boys."

On the 12th of May, 1870, the Admiralty nominated a committee, composed of Captain William Arthur, Captain Morgan Singer, and Lieutenant Wilson (who was then employed in the *Excellent*), to investigate the various properties of Mr. Whitehead's torpedo, and with this object in view, to draw up a programme of the requisite experiments, which would be carried out under the committee's supervision.

A committee of gunnery officers, from the Mediterranean Fleet, had visited Fiume in August of the previous year to witness a series of experiments with this invention, and their report was now supplied to the new committee. An iron paddle-wheel sloop, the *Oberon*, was selected to be fitted with the discharge apparatus in accordance with Mr. Whitehead's designs; this work was proceeding, and he himself was expected

to arrive in England in a few days, when he was suddenly detained in France. He had been on his way home, with his machine packed up in cases, and had reached Paris, when the Franco-Prussian war suddenly broke out, and he was detained as an object of suspicion, as he would not declare the purpose of the mysterious machine in the cases. In this dilemma he appealed to the British Ambassador, who, after some delay, succeeded in getting permission for him to proceed on his journey without having to disclose his secret. It was a near thing whether we were to be first in the field or not, but, thanks to the Ambassador, we were.

Whilst these preparations were in progress, Wilson was sent to the *Royal Sovereign*, a turret ship and tender to the *Excellent* that had been ordered to act as guardship at Cowes, during the presence of the Queen at Osborne. One evening, when Her Majesty was afloat in the *Alberta* to witness the regatta, she suddenly announced her intention of going on board the *Royal Sovereign*. "I suppose she was struck with the extraordinary ugliness of this vessel," wrote Wilson. It was half-past six, and the men were in their old clothes, and there was no time for any preparation before the Queen arrived alongside, accompanied by Prince Arthur, and Princesses Louise and Beatrice.

". . . The Captain and I had to show her all round the ship, and to exercise the turrets for her. Of course, he did nearly all the talking and I did the drilling. She did not venture inside the turrets, so I got Prince Arthur inside by himself. He seems a sensible fellow, with an exceedingly pleasant manner, but he puzzled me rather by asking for the names of the inventors of all the different things. Afterwards the Queen asked Captain Maxwell to introduce us all to her, and then she went away . . . saying that everything was very nice indeed. As it turned out, things could not have gone better if we had had warning, and we were saved all the trouble of preparation."

There followed a dinner to Prince Arthur and a display of fireworks:

". . . Of course as first lieutenant I am supposed to be Jack-of-all-trades, so I had to be head pyrotechnist, and we got up a magnificent display for him. . . ."

Then came a cricket match against the Royal Household, which the Navy won, and by this time the "ugly vessel" had become such a favourite, that she was directed to remain there for the remaining few days of Her Majesty's visit, instead of transferring her duties as intended.

The torpedo experiments and trials commenced on the 31st of August, in the Medway, the secret of the mechanism being jealously guarded by the inventor, and the committee being only informed that the weapon was propelled by a pneumatic engine. Two sizes of torpedo were used—one of 14 inches diameter, capable of carrying a charge of 18 lbs. of glyoxiline, and fired from a frame suspended under a boat; another of 16 inches, with 67 lbs. of guncotton, which was discharged from a tube fixed in the stem of the *Oberon*. The target first used was a net hung between two buoys; but the two final experiments, when the torpedoes carried their explosive charges, were made at an old hulk, whose only protection was a rope net a few feet in front of her side. The first shot sank her, of course.

The report of the committee, which stated that the torpedo was sufficient to ensure the destruction of any ship constructed with a bottom as at present, reads with a somewhat grim humour in these days. It concluded with the statement that "they were unanimously of opinion that any maritime nation failing to provide itself with submarine locomotive torpedoes would be neglecting a great source of power, both for offence and defence." Wilson has left no record of any personal opinions on these experiments, and his share in the report cannot be determined; but it is

worthy of note, that he was thus connected with the introduction of the torpedo from the very first.

On completion of these trials, Wilson was appointed to the *Caledonia*, and was directed to join the *Lord Warden* at Portsmouth, and to act as her gunnery lieutenant on the passage out to the Mediterannean, whither she was conveying the new Commander-in-Chief.

The *Caledonia* was a fully-rigged ship of 6,382 tons displacement; a cut-down and armour-plated three-decker, of 13 knots speed under steam, and armed with four 8-inch and twenty 7-inch muzzle-loading guns. There were five other ships of a similar class on the station, and as exercise aloft was the principal means of training the men, and the measure of the smartness of a ship, the competition between them was very keen, and, at first, Wilson was as much concerned with these drills as with his more special gunnery duties, particularly as he was hoping to succeed the first lieutenant, who was expecting to be promoted shortly. On the 6th of December he wrote:

". . . Both the Captain[1] and Commander[2] have been very pleasant as yet, and I think the Commander especially will be a capital man to work with. . . . I paid one visit to the opera, where I saw 'Somnambula,' which was rather good, as they have got a new Canadian prima-donna called Albani. . . ."

A few days after this, the *Caledonia* was on the point of starting for Smyrna, when the news arrived that the *Psyche* was ashore, and there occurred the events described in the following letter:

"H.M.S. 'CALEDONIA,' OFF SYRACUSE.
"*25th December*, 1870.

". . . Last Thursday week we heard that the *Psyche*, which is a paddle-wheel despatch vessel, something like one of the Queen's yachts in appearance, had got on shore close to Catania, so we had to start off that

[1] Captain Thomas Cochran.
[2] Now Admiral Sir Cyprian Bridge, G.C.B.

night to go to her assistance. We got there the next morning, and found that the *Royal Oak* had got there before us, and as her Captain[1] was senior to ours, of course he was in command. The unfortunate *Psyche* had a great hole in her bottom. . . . She was full of water, and resting on a rock. She was very close to the shore, with a weird-looking old tower immediately over her and Mount Etna behind it. The Cyclops Rocks were about a mile off, but whether it was the identical rock that Polyphemus shied at Ulysses that she was lying on I cannot say—very likely it was. The whole scene would have made a very effective picture, but we had other things to think of than painting. With a ship in such a position it was evident that the first bad weather must break her up, so that if she was to be got off at all it must be done at once; but we were very unfortunate in our chief, and I suppose in the whole service one could hardly have found a man more utterly incapable of doing any work which required a clear head, so the first day nothing was done except taking a few stores and so on out of her. Captain Bridge and I, and I have no doubt many others, talked the matter over and arranged what we would do if we were in command, but could do no more. Captain Cochran evidently was very soon disgusted with the proceedings, and merely sulked and said it did not concern him. The next day a survey was ordered to be held on the vessel by five officers, to decide whether she could be got off or not. Captain Bridge was one of them, and went on board the *Royal Oak* with our plan, and soon came back to me on board the wreck in a great state of delight, saying Captain Hillyar had told him to do as he liked. A few minutes' talk was enough to arrange all the details, and in ten minutes we had set everybody to work as busy as bees; but this state of things was too good to last, and in less than half an hour a message came to Captain Bridge to say that as he was the only man on the survey who said that she could be saved, nothing more was to be done except saving what few stores had not been taken away the day before. This was a great disappointment, but there was no help for it, so nothing again was done till the evening; then

[1] Captain H. S. Hillyar, C.B.

Captain Hillyar, the Commander of the *Royal Oak*, Captain Bridge and myself, all dined with Captain Cochran, and after dinner it was decided that an attempt was to be made, and the two Commanders were told to discuss the matter and let Captain Hillyar know what was decided on. They asked me to join in the discussion, and we very soon arranged all the work for the next morning at daylight. Captain Hare, the Commander of the *Royal Oak*, was not a believer in the possibility of the undertaking, but still he acknowledged that our plan gave the best chance of success, so he put himself into our hands as a very cordial assistant. So far things promised splendidly, but we did not know the obstructive character of our chief. He had not brains enough to understand what was going on, yet could not help blustering and interfering; first he cut out one thing because it was unnecessary, then another because it would take too long, and he wanted her to float at once; then he wanted things done before the necessary preparations were made, and so on until our poor mutilated scheme had no chance of success, and by the evening it became evident that the only chance was to begin at the beginning again the next day. Then the same thing went on again. The Admiral[1] came from Malta, and we had some hopes; but he would not take the control out of Captain Hillyar's hands, and so we spent five days of intense excitement from daylight to dark; every night the two Commanders and myself met in consultation to decide what ought to be done the next day, but very perfectly certain that we should not be allowed to do it. How the work proceeded at all it would be hard to say, as orders were no sooner given than they were counter-ordered. No one took the command. Sometimes I found myself virtually in control of the proceedings, and sometimes snubbed if I made a suggestion. Yet somehow or other we did advance slowly, and at our meeting on Tuesday evening I declared that if they would only let us go on working through the night she would be afloat by the Thursday morning, but to our dismay on Wednesday afternoon, just as we were congratulating ourselves

[1] Rear-Admiral Cooper-Key, Admiral Superintendent of Malta Dockyard.

that we should succeed, in spite of Captain Hillyar, it was announced that the attempt was to be given up and poor *Psyche* abandoned to her fate. In vain we appealed to the Admiral to be allowed to go on working through the night, promising that she should be afloat by eight o'clock the next morning; although nearly every suggestion in the whole course of the work was made by one of us, we had no official authority, and he would not hear us. It was with sad hearts we saw them undo all that we had done, and a ruthless tribe of carpenters set to work to cut her to pieces to save bits of brass and copper. . . ."

Three weeks later he wrote again from Malta:

". . . I think I have at last recovered my temper after that affair, more especially as we passed the place where she was afterwards and found not a vestige of her showing above the water, so that it was quite certain there was no possibility of renewing the attempt. One of my greatest comforts after the disappointment was to have a long talk with Admiral Key about it. Of course I was more respectful to my superiors with him than I have been with you, but he showed so clearly that he understood exactly what ought to have been done, and gave his ideas so pleasantly that it was quite a pleasure, as well as a lesson, to listen to him. . . ."

The wreck was thus beyond any further hope of salvage; but in the following summer Wilson had the satisfaction of being sent to recover her boilers in a small steamer called the *Weser*.

". . . My little ship's company consisted of one sub-lieutenant, three midshipmen, two engineers, and men enough to make up fifty altogether; they were nearly all picked, so I had no trouble with them from beginning to end. The ship herself was about as unmanageable as a ship could be, as she was very difficult to steer, and the engines could not be depended on to start within five minutes of the time they were wanted, but as her bad character was well known it did not matter so much as it otherwise would have done. She rolled very heavily on the way across, and

the ship's company were so little used to such antics, that they were half of them sea-sick. We got over to the place on Sunday forenoon, but the sea was too rough to do any work until Friday; we tried twice when it looked a little smoother than usual, but the first time we got a lighter (? in place) we were being damaged by bumping on the rocks, and the second time we succeeded in raising one of the boilers, but just as we thought it was safe, the bumping of the sea carried the chain away and it went down in deep water, so we lost it altogether. On Friday and Saturday, however, we had better luck and saved the other three, getting back safely to Malta on Sunday forenoon. I daresay you don't see anything very interesting in such a trip, but I think everybody enjoyed it, and if you could have seen the blank faces of everybody when the first boiler was lost, you would have seen what a keen interest everybody took in it. Before we started I was regularly besieged by all the midshipmen to be allowed to go, and I found it was quite impossible to give too much work to those I took with me. My share in the business was a very minor one, as our vessel was too unmanageable to be of much use except to carry the boilers after they had been got up. . . . But the Admiral made a great deal of me, as he asked me to dinner every night, and he was always full of anxiety that I should not get into difficulties with my unwieldy craft."

A bit of rough work like this, when well conducted, generally affords a pleasant and useful retrospect after it is all over, but the principal occupation of a ship's company in peace is the development and maintenance of an efficient personnel and material, and as gunnery lieutenant, Wilson's chief interest and duty was the improvement of the gunnery of his ship. The gunnery problems of the day were, of course, simple in comparison with those of the present time, but though differing in degree they were alike in aim—the aim of delivering a concentrated broadside. The procedure was for the officer of the quarters to name a "directing gun," all other guns would then be laid with the same elevation, and trained on one of three

bearings, the bow, beam, or quarter, the broadside would then be fired by order of the officer, who would receive a signal from the captain of the directing gun when the sights were on. As only three bearings were used, the concentration was only a rough one, and admitted of considerable errors in direction, whereby much of the intended blow would have gone wide of the mark. To obtain a more precise result, Wilson calculated the differences in the amount of training for different distances, and had the rear racers, on which the guns were traversed, graduated at intervals, so that he could concentrate on more bearings; he then constructed a most ingenious appliance for giving each gun its proper correction in training when placed against the edge of the racer. The Captains of the guns soon learned how to use it, and it served its purpose most admirably.

Another of his activities at this time was the fitting and mounting of an outrigger torpedo in a single banked boat. It consisted of an explosive charge at the end of a spar, which could be thrust over the bows and under a ship's bottom. The idea was not new, for it had been used in the Civil War in the United States, and though no steps had been taken to develop it officially, Wilson was much impressed with its possibilities, for he proceeded to devise and fit the whole apparatus, making the electrical firing battery with his own hands. The use of submarine mines was also a subject of his study, and in collaboration with the gunnery officer of the *Lord Warden*, Lieutenant Kane, he fitted a set of mines and circuits, made a number of experiments, and gained an experience which was of much use to him afterwards.

Apart from these occupations, there was nothing very notable in the commission. The time was passed in the usual cruises to Sicily, the coasts of Italy and Greece, the Ionian Islands and the Levant. There was an occasional chance of some sport with the woodcock and snipe, and an opportunity was found to visit

Pompeii and the ruins of Syracuse, and to lead a party to the top of Mount Etna. In June, 1871, a change took place in the command, and Captain Cochran was succeeded by Captain Stanhope, but three weeks later at Corfu—

". . . Captain Stanhope got a severe attack of smallpox, and for fear of infection they packed us off to Malta as fast as possible. He has succeeded in making himself so generally liked in the short time he has been on board, that it is a great pity we should lose him so soon, but I fear the attack is a very severe one."

It ended fatally, and Captain Edward Lambert came out to take his place. One or two other changes also occurred in the next few months, and the ship seems to have fallen off in her performances in consequence, for he wrote home on the 4th of March, 1872, from Malta that:

". . . I have been enjoying my birthday at a good forenoon's sail drill, in which for the first time for the last six months we have beaten all the other ships hollow. . . . I get out of the ship very seldom, as there is plenty to do on board and very little ashore; a game of rackets, or a walk, once or twice a week, is all I get ashore, with an occasional visit to the Opera. . . ."

The *Caledonia* took part in a cruise of the combined Mediterranean and Channel Fleets on the West Coast of Spain, in the summer, after which her ship's company were paid off, and, in September, Wilson returned to England.

On the 9th of October, 1872, the *Narcissus* was recommissioned, under Captain J. O. Hopkins, as the flagship of the Detached Squadron, and Wilson joined her as first lieutenant. The Squadron consisted of six frigates, and its purpose was that of training the rising generation of officers and men in practical seamanship. It was not restricted to any particular

station as a cruising ground, but was sent wherever circumstances were thought to require it; a previous Squadron had been round the world, and another had visited the East Indies. Passage from port to port was made almost entirely under sail, so that a large portion of its time was spent at sea. This afforded an excellent opportunity for a regular routine of drill and instruction, but gained it the nickname of the "Hungry Six." On this occasion the Squadron was ordered to proceed to the West Indies, where nothing but fine weather would be experienced; but they were destined to have a "regular dusting" before they reached it. The first occasion happened in Plymouth Sound on a Sunday afternoon.

". . . At twelve o'clock we were congratulating ourselves that we had at last got a fine day, and people were planning walks for the afternoon. By the time lunch was over things were not looking quite so pleasant, and most people came to the conclusion that they had better remain on board. . . . At three o'clock, one of the heaviest gales I have ever seen in England sprang up suddenly, our cable parted, and for five minutes we had a most exciting time of it, the ship flying away before the wind towards a mass of merchant shipping which was anchored in shore . . . luckily our second anchor brought us up in time, and a third made us quite safe, though we lost two boats, and it has taken all day to put things to rights again and pick up our lost anchor. . . ."

The Squadron sailed from Plymouth on the 15th of January, and was no sooner in the Bay of Biscay than it ran into another gale. Gales of wind are common enough in a life at sea to pass without notice, except when one happens to be of unusual violence, or there occurs some incident of damage or critical circumstance, which calls for a high test of pluck, skill, and endurance. A ship in a heavy gale is subjected to a tremendous strain by the rolling and pitching. Ropes that were taut as bars stretch and carry away; masts, yards, and guns work looser and looser; constant

attention is necessary, and every resource is taxed to ensure the safety of the ship and spars. Such was the case in the instance about to be related, the account of which has been furnished by an officer who was a midshipman in the ship at the time:

18*th January*, 10.45 p.m.—Lost sight of ships in company after wearing in a heavy westerly gale, gradually increasing in force to 8 to 9. Sail was shortened to close reefed maintopsail, storm staysail, and mizen trysail.

20*th January*, 7.50 a.m.—Heavy squall struck ship. Barometer, 28·90; force of wind, 9 to 11; ship rolling 27 degrees to windward and 35 to leeward. Two bobstay collars carried away. Lieutenant Wilson, the Captain of the forecastle, was lowered over the bows, and succeeded in re-securing the bowsprit.

This is necessarily rather technical language, and it may be explained that the "bobstays" are the rigging which keep the head of the bowsprit down against the pull of the forestays, so that when the collars to which the bobstays are set up are carried away, the foremast is left without support, and what Wilson and his companions did, was to get under the bowsprit in this raging sea and put a tackle on in the place of the bobstays.

The ship had two of her maindeck ports smashed by the heavy seas, the masts had to be secured by "swifting in" the rigging and getting up "runners and tackles," and as the gale continued till the 24th, the ship had become dangerously embayed by drifting to leeward. Fortunately, it then moderated, and she was able to make headway under steam, and proceed to the "rendezvous" at Vigo.

It is highly characteristic of Wilson that no notice of this event appears in his correspondence.

After touching at Trinidad, the Squadron proceeded round the islands, both French and British. At Gaudeloupe, a court-martial was held on a midshipman,

a relative of an old friend, and Wilson took upon himself the office of counsel for the defence.

". . . Being only seventeen, and quite ignorant of the ways of courts-martial, he was very glad to leave the case entirely in my hands, and so left me much freer to act in my own way than I should have been with an older person. . . . It was a long job, lasting nearly two whole days, but in the end I succeeded in getting him acquitted. . . . I can easily imagine a lawyer taking a most intense interest in a trial. I know while it lasted I could think of nothing else. . . ."

The Squadron completed its cruise among the remaining islands, reached Bermuda in June, and, after a refit, proceeded to Halifax in Nova Scotia, whence they were ordered to Gibraltar, as troubles were brewing in Spain in consequence of the Carlist rising, and more ships were needed to protect British interests.

Wilson had been very justly expecting his promotion; he was eleven-and-a-half years' seniority, and out of the thirty-nine promotions of the previous eighteen months, eighteen were his juniors on the lieutenants' list. On the 20th of June he wrote home:

". . . I have heard nothing more of any prospect of promotion except a letter from Admiral Milne to the Admiral, deploring the state of the Lieutenants' and Commanders' lists, and the impossibility of promoting anybody, so I suppose I may make up my mind to wait for some time longer. I rather expected I was to be promoted by this mail, but if I am to wait I could not be better placed than I am, so I don't mind much. . . ."

The facts were that out of the above-mentioned eighteen juniors, two had been promoted out of the Royal Yacht, three had been staff officers in the *Excellent* and *Cambridge*, and seven were for "haul down" vacancies. This ancient privilege of granting promotion to the nominee of an Admiral on striking his flag, was being notoriously abused by the promotion of relatives of five or six years' standing or even

less, and was causing great discontent among the senior men on the list. It was an anachronism, and was soon afterwards abolished.

However, his patience was soon rewarded, for on the 18th of September a small batch of six promotions was announced, and Wilson had the satisfaction of finding himself included. He was the junior but one of the batch, and was able to get home in time for his brother's wedding.

Before continuing further with the narrative, it may be permitted to quote an old record of the "times" of evolutions, which has unexpectedly come to light. It may not convey much to the uninitiated, but there are still many left who took part in the evolutions of shifting spars and sails of these days, and can appreciate such a record as a measure of smartness and skill, and perhaps read it with a thrill begotten of personal experiences:

SMARTEST TIMES, H.M.S. "NARCISSUS," DECEMBER, 1872, TO NOVEMBER, 1873.

	Mins.	Secs.
Up topgallant masts, cross topgallant and royal yards	2	15
Cross upper yards	0	22
Down upper yards	0	33
Shift topgallant masts	13	55
Hoist in boats	19	50
Out boats	10	40
Man and arm boats (inboard)	25	20
,, ,, ,, (outboard)	12	20
Make all possible sail	3	42
Shorten sail to topsails	1	47
Shift jibboom	15	50
Reef topsails	1	30
Shift topsail yards	24	10
Shift main topsail yard	20	0
Shift topsails	8	20
Set upper sails	1	50
Down topgallant masts	2	55
Shift courses	4	35

CHAPTER III

COMMANDER: "RALEIGH" AND "VERNON" (1874-1880)

Wilson did not remain long unemployed. The *Raleigh*, a new type of frigate, of 5,200 tons, constructed of iron sheathed with wood, carrying an armament of two 9-inch, fourteen 7-inch, and six 64-pounders, with a speed of 15 knots under steam, was about to be commissioned for the first time by Captain George Tryon, for service in the Detached Squadron, and Wilson was appointed to her in December. She was the last ship in the service that was rigged and fitted out by her own crew, and as she was a new type, and alterations were found occasionally necessary, this process took nearly four months. She was then sent on an experimental cruise to test her seagoing qualities and behaviour under sail, so that it was not till November that she joined the Squadron, which was then composed of the *Narcissus* (flagship), the *Topaze*, *Immortalité*, *Newcastle*, and *Doris*, and was commanded by Rear-Admiral G. G. Randolph.

Writing from Gibraltar on the 8th of November, Wilson says:

". . . I was delighted to find the ship sails much better than I expected. We are generally quite as good as the *Narcissus*, though not quite a match for the *Immortalité*. I must say, however, that I think the *Narcissus* has fallen off in sailing since last commission, as she was nearly, if not quite, the best of the Squadron then, but I did not expect to find this ship nearly a match for any of the frigates. The Admiral has given us no peace since we came here; in fact, I don't think he understands at all that people want

rest. . . . He inspected us last Thursday and said he was very much pleased, so we have not begun to quarrel yet. . . ."

This is an old story with Commanders, but the case must have been a bad one to have made Wilson growl about it.

From Gibraltar, the Squadron proceeded on a cruise round the South Atlantic, visiting the Falkland Islands and the Cape. Wilson was always a keen boat sailor, and in a race at Simon's Bay he had the very unusual experience of sailing a dead heat with another boat (the Admiral's barge); but when the race was sailed again at St. Vincent he won easily.

After being detached to convey Sir Garnet Wolseley and his Staff from Cape Town to Durban, the *Raleigh* rejoined the Squadron at St. Helena, whence they all proceeded to the north, and arrived at Gibraltar again in the middle of June, to find orders awaiting them to proceed to India to act as an escort to the Prince of Wales during his visit to that country. There was no time to lose, so after a hurried refit of the sails and rigging, of which they were in much need, the Squadron started on the 14th of July on its long voyage round the Cape under Rear-Admiral Rowley Lambert.

In the course of this passage, having reached well across the south-east trade wind and down to the south, the Squadron was running to the east again before a strong westerly wind, when at a quarter-past six one morning, while the men were stowing hammocks, a man fell overboard from the *Raleigh*. The incident has been related by Wilson in an account published in Admiral Fitzgerald's "Life of Sir George Tryon," and is reproduced here as Wilson was one of the principal actors in it.

"On the passage out, while running down the westerly winds towards the Cape of Good Hope, an able seaman named Walter Gatfield fell overboard from the forecastle hammock netting. The ship was run-

ning at the rate of 11 knots, under double-reefed topsails, with the wind on the starboard quarter, and a very heavy sea. For a moment it seemed doubtful whether a boat could live in such a sea, but the man was seen to be swimming strongly as he passed the stern, and it seemed worth the risk to try and save him. The lifeboat was manned instantly, and the helm put down to heave the ship to; the smallest midshipman in the ship, Mr. Warrender, promptly jumped into the lifeboat to take charge of her, but he was called out to make room for Lieutenant Kingscote. While the ship was coming to the wind, the boat's crew were made to put on their cork jackets, and ropes' ends were thrown over the quarter for them to get hold of in case the boat was smashed alongside. The ship was fortunately remarkably steady, and the boat was lowered and slipped without difficulty; but as she dropped astern, she was sucked under the counter and bound hard against the ship's side for a few seconds, during which it looked as if she must be capsized. The efforts of the men, however, and the lift of the sea threw her clear before any harm was done, and once clear of the ship she had little difficulty in reaching and picking up the man, who was holding on to the lifebuoy. In the meantime, however, the ship was drifting fast to the leeward, and it would have been extremely dangerous for the boat to turn round and pull down to her with the sea astern; so the sails were filled, yards braced sharp up, and topgallant sails and jib set (though it was extremely doubtful whether they would stand) to try and get to windward. With such a heavy sea on it was impossible to tack, and wearing involved a great loss of ground; moreover, it was not safe to stand on far on one tack for fear of losing sight of the boat. Fortunately, under the heavy press of sail she was carrying, the ship wore very well, though under ordinary conditions she was very slow in wearing. After wearing the second time, she just fetched to windward of the boat, which was then hoisted without much difficulty.

"Captain Tryon was so pleased with the result of this accident that he had a picture painted of the event, and gave a photographic copy of it to every officer in the ship."

Fitzgerald adds: "Thus writes the Commander of the *Raleigh*, who modestly says nothing about his own share in this successful piece of seamanship; though, as all the executive orders in the working of a man-of-war are given by the Commander, it is not too much to say that, next to the Captain, the success of such an evolution depends upon the skill, nerve, and good judgment of the executive officer. Tryon received the warmest congratulations both from the Admiral and from his brother Captains, and he deserved them, for success depended upon good seamanship, sound judgment, and a highly-disciplined crew." It only remains to add that a large water-colour sketch of this incident was always hung prominently in Wilson's cabin, and is now in the drawing-room of his old home at Swaffham.

The Squadron arrived at Bombay on the 22nd of October, in good time to wash off the weather stains before His Royal Highness came in the *Serapis* on the 8th of November. The next fortnight was a succession of ceremonies and festivities, and officers and men were given as much liberty as possible to join in them.

". . . On Wednesday I went to the Prince of Wales' Levee . . . and after that came a school feast to I don't know how many thousand children, Christians, Hindoos, Mohammedans, and Parsees, all feasting together, as far as I could see, without fighting. The Parsees formed the attractive feature of the scene, as, instead of putting all their school children into the same ugly dress, they seem to take care that no two shall be alike, and they are all dressed in brilliant colours. . . ."

The programme of the Prince's visit was arranged so that His Royal Highness should proceed to Calcutta by sea, calling at Colombo on his way, and as the *Raleigh* was the only ship fast enough to keep company with the *Serapis*, she was ordered to act as escort, while the others were sent on ahead to Colombo. After the Prince's departure from Ceylon,

the *Raleigh* went on independently to Madras for a visit, and from there worked her way back to Bombay, as she drew too much water to get up the Hooghly.

The spell at Bombay afforded an opportunity to get away up country, and Wilson took advantage of it by spending some days with a relative in the Civil Service, who was out "in camp," but otherwise the time passed uneventfully until an unexpected piece of news arrived from home. On the 9th of February he wrote:

". . . I have just had notice that I am going to be appointed to the *Vernon*, which is the school of instruction in torpedoes, and that I am to be in England by the 1st of April. I have not got my appointment yet, but I shall probably get it very soon, and leave by the first mail steamer in March, but of that I am by no means certain. The ship will arrive home so soon after the time named that they may keep me in the ship until she gets home, which I should like very much better.

"And now to tell you what the appointment means. The *Vernon* has been for the last three years a school of instruction in torpedoes under the command of Captain Fisher, who, you probably know, is a great friend of mine. He joined her as a Commander, and was afterwards promoted and kept in command, but until now she has always been attached as a tender to the *Excellent*, and so he has always been under the orders of her Captain. Now it is proposed to make the *Vernon* entirely independent of the *Excellent*. . . . It is a very good appointment for me indeed, as I have now had a great deal of sea work, and can well afford to take a harbour appointment. . . . I have not heard whether they intend to make any bargain with me about promotion, but, provided I am successful, it ought to give it me in about three years. . . ."

The ship had just been inspected by both the Commander-in-Chief of the station and Rear-Admiral Lambert, and "nothing could have gone smoother," so that he was leaving the ship with an excellent record to his credit. A passage was engaged for him

in the mail steamer sailing at the end of the month, and on the 9th of March he wrote home that he would arrive in London on the 25th, adding:

". . . I was very sorry to leave the *Raleigh;* it seemed such a very short time before she would be on her road home herself that it seemed a pity not to finish her off, but the orders to be home by the 1st of April were positive, and I could not stop. Nothing could have been kinder than the farewell I got from Captain Tryon and all the officers, the latter finishing by manning the boat and pulling me on board the steamer. . . ."

Wilson had now finished with crossing royal yards and shifting topsails; henceforth his occupations were to be in striking contrast to those of the past. It was a new departure in his professional career. His experience, qualifications, and abilities rendered him a very fit man for the new post, and there lay before him the development and improvement of new weapons, which were to revolutionize naval tactics and ship construction.

The first official step taken in the Navy to study and develop torpedo work was in 1867, when Lieutenant H. C. Kane, of the *Excellent*, was directed to compile a manual on the subject, after a course of instruction at the Royal Engineering School of Submarine Mining. This manual, which was subsequently enlarged by Commander Fisher, formed the basis of the instruction given, and the school thus begun, as a branch of the *Excellent*, was carried on in the *Vernon* as a "tender," until the growing importance and the complexity of the subject required a greater freedom and a more concentrated attention than such a subordinate position allowed. This separation was finally accomplished on the 26th of April, 1876, when the *Vernon* was commissioned by Captain W. Arthur as an independent establishment, with Wilson as Commander.

The word "torpedo" was used as meaning any form of explosive submarine weapon, and was not restricted,

as it has since become, to the automobile; the work of the new school was, therefore, naturally divided into the two subjects of the mine and the Whitehead, the former involving the use of electricity, the applications of which to naval purposes for internal lighting and the searchlight soon became a separate subject of study.

Submarine mining had been highly developed by the Royal Engineers, who were responsible for the defences of our coasts and harbours, but their system was not adapted to naval requirements. It was part of a permanent defence, worked by a special corps of officers and men, and requiring the use of elaborate apparatus; whereas the Navy wanted a system which could be readily laid down for the protection of a temporary base, and perhaps raised again and laid elsewhere; whose component parts could be carried in an ordinary man-of-war, and handled in her boats; also a form of mine which could be used offensively off an enemy's ports with the resources of a squadron. These two ideas, defensive and offensive, were developed in the course of the next four years, and a system of laying "observation mines" was arrived at which practically remained the same for the twenty years that it lasted, until, in fact, the system was discarded altogether; but the Navy never took very kindly to either of these ideas, nor can it be said that their use ever reached a satisfactory pitch of efficiency. With the development of mining came also the need of devising means of destroying an enemy's minefield, and in due course, after experiment and practice, regular methods were prescribed for "sweeping" for mines and for "creeping" for cables. Experience has since shown that "sweeping" is the only reliable method of removing a minefield, but another method, which was largely due to Wilson, and was very highly developed, is worthy of notice, though obsolete, as it called for all the coolness, resolution, and daring displayed in the boat attacks and cutting-out expeditions of previous wars. It was called "countermining."

The operation was intended to be carried out by several units working in pairs, and each unit consisted of a steamboat to tow, a launch to carry the mines, etc., and a smaller boat to carry the electric battery. The mines, twelve in number, and two markbuoys to show the beginning and end of the line, were suspended in order round the launch, with their moorings and electric cables coiled on the top of each, the ends of the cable being passed into the steamboat and battery boat, the whole being arranged to drop in succession automatically at the prescribed intervals as soon as the run had commenced. A pair of units would form in line abreast, 180 feet apart, and steer for the place on the edge of the supposed minefield where it was intended to begin. The battery boats would then slip the tow and anchor, the pull of the cable would then release the first markbuoy, and after it the mines in succession until the second markbuoy fell, when the officer in the steamboat would press the firing key and explode the twelve mines of his line simultaneously, and if the other unit was in station, the mines of that line would also go off at practically the same moment. The destructive radius of each mine was 90 feet, so that the channel thus cleared was 120 yards wide. These two units would then make the best of their way to safety, while another pair advanced to continue the lines where the first pair had ended, and so on for the length of the channel to be cleared. It was a fine conception, and the details were worked up to such a perfection that a line could be run and fired in five minutes, though, of course, the preparations for this took some hours. Methods of attack and defence act and react on each other; an advance in the one soon produces an answer from the other, and thus, whatever chances of success countermining might have had on its inception, these were swept away by the advent of the quick-firing gun to defend the minefields.

As regards the other side, that of the torpedo proper, though the original Whitehead was a wonderful piece

of mechanism, it was not without defects. Its speed was slow, and its behaviour on discharge from a moving vessel erratic, through the deflection caused by the torpedo striking the still water. The speed was much improved by the adoption of a new pattern engine, and one of the early tasks that Wilson set himself was the solution of the problem of correct aim. He made a careful study of the factors, and, after a long series of experiments in the *Vesuvius* and in steam-boats, he brought out a pattern of Torpedo Director, or aiming apparatus, which was officially adopted for use in the Service in 1876.

With improvements in the weapon itself came extensions of the means to use it. An entirely new type of vessel, the torpedo boat, was evolved, relying for its protection on its small size and high speed, with, what was then considered, a wide radius of action; a smaller class of boat was also being built which could be carried and hoisted in and out of a ship. A special vessel, the *Polyphemus*, described as a torpedo ram, and presenting many problems, was also being constructed; ships were being fitted with above-water discharges, and, after many experiments, a design for a submerged broadside tube had been produced which was about to be fitted in the new battleship, *Inflexible*.

Another field of experiment was the use of nets as a protection to ships, of which the first, according to what Wilson used to say, was made by Captain Arthur and his coxswain, working together without other assistance on the upper deck—presumably because everyone else was too busy. A set of these was made of wire, and it is believed that the first ship to be supplied with them was the *Northampton*, in 1880.

When Professor Graham Bell, the inventor of the telephone, came to England, one of the first places he visited was the *Vernon*, with the result that very soon the instruments were made on board and the invention brought into use. It was applied to a diver's helmet, as a great improvement on existing means of communi-

cation by writing on a slate, and a cable was run across the harbour to the Captain's house at Fareham, to establish communication with him and the ship.

The wide field of investigation and experiment that the study of all these subjects occasioned reached, of course, into the domains of many branches of science, and provided questions which only the chemist, the electrician, the engineer, or the naval architect could solve; but on the professional side, Wilson had a hand in them all, for he was the head of the instructional staff, and the examiner of the officers' classes. Admirals and Captains on half-pay attended his lectures; there were classes of lieutenants qualifying for the new post of torpedo lieutenant, and of gunnery officers for instruction in the use of these new weapons, as well as a number of seamen being taught the use and management of electric batteries and circuits.

With the development of these novel instruments and weapons, an exhibition by the *Vernon* became a feature of the visits to the port of distinguished men and Members of Parliament, and on one occasion Queen Victoria commanded a display for her own benefit.

It is related that on this occasion she sent a message desiring Commander Wilson's presence, which reached him at a moment when he was deeply engaged in completing the connection of his circuits, on which the success of the programme depended; but Wilson, ignoring the etiquette usually observed in such circumstances, sent back to say he would come in a few minutes, or words to that effect. Her Majesty, though unaccustomed to such a reply, made no remark, but after the exhibition had gone off very well, she personally conveyed to him her pleasure at what she had seen.

Wilson was an indefatigable worker himself, but his enthusiasm for it sometimes carried him beyond the limits of routine as regards others, and a story is told of how on one occasion, on a winter's evening, he sent

back a class of officers to complete in the dark the weighing of a line of mines, which they had been unable to finish in the appointed hours for work. He was straightforward and firm, firm as a rock, but imposed no petty restraints on the liberties of officers or men, and there grew up in the officers' mess a fine spirit of "camaraderie" between the staff and their pupils, which made the *Vernon* a very popular ship.

It has been said that his promotion was delayed in consequence of the unfavourable opinion of the state of the ship, which was formed by the Admiralty on the occasion of an official visit; it was his weak point, as he always admitted, but the delay, if any, was not very appreciable.

Of the few private letters of this period that have been preserved, the first relates to the arrival of the *Alert* and *Discovery*, the two ships of Captain Nares' Arctic Expedition:

"H.M.S. 'VERNON,'
"*2nd November*, 1876.

"We have had a glorious day to greet our Arctic friends. I went out this morning to see some torpedo experiments in Stokes Bay, and just finished in time to follow the Arctic ships in. It was a very pretty sight, the shore and the rigging of all the ships crowded with people cheering them. The two Arctic ships flying the signal 'No place like home.' I went on board the *Discovery* afterwards, and never saw a lot of people looking so thoroughly happy; they all seem to be in the most perfect health, and as jolly as they can be. I had a great many friends amongst the officers, and enjoyed seeing them back again immensely. They all go on three weeks' leave to-morrow, and in the meantime the public will be able to see the ships just as they are. They then come back to pay their ships off. It seems a very good arrangement, as they are all probably anxious to get to their homes as soon as possible. I found Rawson[1] had his whole family down here to receive him, and I think a good many of the others had. Rawson seemed to think

[1] Lieutenant Wyatt Rawson.

that he could himself have stood another winter there very well, but he says the men were breaking down very fast, and they would have lost a great many had they done so.

"I had a long letter a day or two ago from Captain Tryon, giving me an account of all the *Raleigh's* doings. They seem to keep her hard at work.

"I shall be very glad to help you with the church gates; I had better see about it whenever I get to Swaffham."

It was seldom that Wilson suffered from ill-health, but when he did, he was evidently a very bad patient, as appears from the next letter.

"H.M.S. 'VERNON,'
"*Saturday.*

"I suppose we two old cripples ought to condole with each other. I wish I could feel that your foot was progressing as fast as my throat.

"My little party went off very well yesterday. Bertha [Miss Dowell] kindly undertook to meet the uncles at the railway station, and show them round the dockyard, bringing them on board the *Vernon* at about half-past one for lunch. The doctor protested strongly against my getting up, but, finding protest was no use, gave way with a good grace, and acknowledged this morning that I appeared all the better for it.

"Heyland kindly undertook to preside at luncheon and save me from talking as much as possible, and as you can imagine Uncle Roland, once set going, did his best to save me too. Of course I did not attempt to eat in company, that is far too serious a business with me as yet; but when Heyland took them over to show them the lecture-room, I went at my beef-tea very carefully, a spoonful at a time. As there was still time before their train went, and long-continued talking was beyond me, I gave them a boat for a pull down the harbour, and to find their way to the station afterwards. . . .

"The result, as far as I was concerned, was that I slept like a top last night for the first time since last Saturday, only waking three times from the pain of the throat, and then only for a short time. I was

allowed up again this afternoon, and spent an hour walking up and down the main deck as hard as I could go. I have no doubt the exercise will do me more good than all the doctors' medicine in the world. I have no idea how I came by the sore throat. The only imprudence I can remember is remaining indoors all Saturday, which was a thoroughly wet day, instead of going out and getting wet, which is my usual habit. . . ."

After a very strong recommendation of him, in June, 1879, by Captain Arthur, Wilson was promoted to Captain on the 20th of April following, and on being relieved, was ordered to correct the "Torpedo Manual," and bring it up to date, thus summarizing the work of his past four years.

CHAPTER IV

CAPTAIN: "HECLA" (1881-1884)

A LONG list of Captains, waiting for employment after promotion, foreboded a period of half-pay, but before the seeds which Wilson sowed in his garden had had time to germinate, he was appointed to the command of the *Hecla*, a torpedo depôt ship attached to the Mediterranean Fleet.

The *Hecla* was a merchant ship which had been bought by the Admiralty in 1878, while still on the stocks, for conversion to her present purpose. Besides a large outfit of mines, cables, and torpedoes, she carried six second-class torpedo-boats, and machinery for executing small repairs.

An undated copy of a letter to Sir Cooper Key, who was First Sea Lord at this time, has come to hand, and may be here quoted as expressing Wilson's opinion of the uses to which such a vessel should be put:

"I consider the *Hecla* first of all a specimen of an armed merchant ship—a pattern by which any number can be turned out in case of war. It should be our business to find out in every possible way how far merchant ships can be made to do the duties of men-of-war, and how they can be most efficiently converted. For this purpose, when attached to a squadron, she should take much the same place in proportion to the number of men, as any other unarmoured ship, such as the *Iris*, joining in all evolutions, etc., as far as her means will allow.

"Secondly, she is a torpedo store ship, to enable a squadron to carry out any operations of attack or defence at the shortest possible notice. The organization for this wants to be carefully combined with the use of the stores the ironclads carry, and to become

as regular a weekly drill as landing small arm men or field-guns. The time devoted to it need not be much, but it must be regular, and whatever is done must be made an evolution of. Work like that at Bantry is very useful, but it was very different to a squadron evolution. The presence or absence of the *Hecla* should make little or no difference in the weekly routine of a squadron, only that evolutions that can only be done partially, or on a small scale, when she is away, would be done thoroughly when she is present.

"Thirdly, she is an armed transport, and might be used as a transport whenever required. With only her peace establishment of stores, she must have a large amount of cargo space empty, and her cost might be saved over and over again, without greatly interfering with the torpedo exercises, if, when the emergency arose, she was put on to run stores to the Cape or Ashanti, etc., instead of a hired transport. The more she is worked the more people will believe in her, and since torpedo stores are carried though only to a small extent on board the ironclads as well as in the *Hecla*, the drills may go on in each place independently, so that little would be lost while the *Hecla* is away, and the results may be tested by actual practice when she is present."

Modern opinion will not agree with his third proposition, as it combines too many purposes in one ship.

He took over the command of the ship on the 25th of March, at Malta, and at once became engaged in a series of fleet exercises in mining and countermining, running torpedo-boats and practising jumping booms. After a month of this, he was sent on an independent cruise to the Ionian Islands, visiting Corfu, Argostoli, Zante, Ithaca, and Patras. The first opportunity at sea was taken to determine the path and diameter of the ship's turning circle, a subject to which Captain P. H. Colomb had recently drawn attention by some trials in the *Thunderer*, and which was of special importance in the *Hecla* as she was a very unhandy ship. A further series of drills in mining, and rigging

net defences, was carried out, and the revision of the "Torpedo Manual," which he had brought out with him, was continued. Intervals in all this work were found for recreation for everyone. There were expeditions to places of interest, lawn-tennis parties, picnics and dinners, seining parties and fishing excursions. Thus, on the 9th of May, he wrote from Corfu:

". . . We anchored right at the bottom of the bay, eight miles from the town, where there are no inhabitants except a few shepherds and charcoal burners, and gave ourselves up to exercises in the daytime and fishing at night. We had seining parties every night which were very successful, catching as much fish as all hands could eat. The men enjoyed themselves thoroughly, lighting large fires and brewing coffee on the beach between the hauls. Our fly-fishers, too, were very successful, catching some very fine trout in a stream close to the ship. I paid one visit to the town across the bay to pay my respects to the Pasha. . . . I also walked, or rather climbed, over the hills across the promontory that forms the bay, from whence I could get a view of the heel of Italy's boot forty or fifty miles off. I came across no one but a couple of shepherds, who were very hospitable. The 'gentle shepherd' in this country goes about with his girdle stuck full of pistols, knives, and yataghans, but nothing can be nicer than their manners. They invited me to their hut, took the greatest care to call off their dogs, and gave me some very sour goat's milk and a white concoction of curds that one of the women was making in a bag. Of course, there was no language I could talk to them in. . . . This is a terrible place for a man that is not a linguist. Dining at the Consul's the other night, there was English, French, Italian, Greek, and Turkish all being talked at once in the drawing-room. An unfortunate man like me, with only one language and a bit, was very much out of it. My picnic ended the way of all picnics—in rain. I took half the party to see a lovely garden called Episcopiani, leaving the rest to play lawn-tennis on a ground we had marked among the olive-trees. We had hardly got there when the rain came down. . . . It had evidently set in for a wet night, so we

had to cover in the boats as well as we could and start back. . . ."

Again, on the 25th, writing from Patras in the Gulf of Corinth, he described an expedition to the top of the Black Mountain in Cephalonia, after which came—

"Another curiosity in Cephalonia which everybody goes to see, but nobody can explain, is two streams which reverse the natural order of things, and run always from the sea inland. The water turns two mills and then disappears among the rocks, but where it goes nobody knows. From Zante I managed the expedition to Olympia as I intended. It entailed a very hard day's work, but it was well worth the labour. We started in a torpedo-boat at four o'clock in the morning for a place called Kattacollo, which is 23 miles on the mainland. There we got carriages and drove first to a place called Pyrgos, about 9 miles, and then to Olympia, about 20 miles further, through very pretty country. Olympia itself is a beautiful valley, and must have looked magnificent when all the temples were erect. Six years ago there was not a vestige of a stone visible to show where its site was. Now an immense space has been excavated, and the whole space is covered with columns, capitals, pedestals, etc., all thrown down, probably by an earthquake, but sufficiently in place to be able to make out where each temple and all the other buildings connected with the games stood. The two professors, one a German and the other a Greek, who were engaged in the excavations, were exceedingly kind, and took a great deal of trouble to show us everything. First the German showed us round two museums that have been established temporarily to contain the statues, bronzes, etc., that have been discovered. Then the Greek, Mr. Phillias, took us all round the excavations, and insisted on showing us everything in spite of a fierce burning sun that nearly roasted us. . . .

"We got back to Kattacollo about half-past nine, and then a French lady, the wife of a French Civil Engineer, insisted on our coming into her house for supper in the most hospitable fashion, and indeed offered to put us up for the night. We had to go

back, however, and we got back to the ship quite ready for bed about one o'clock in the morning."

The next letter is from Ithaca, dated 29th of May:

". . . The island is very barren and poor compared with the others, and for a man that has not got the 'Odyssey' by heart not so very interesting. There are any amount of relics of Ulysses and Homer, but not much else to see. I went to Ulysses' castle yesterday, which entailed a hard climb for about an hour up a steep hill, and gave a magnificent view, on one side of Cephalonia and the whole length of the channel between the two islands, and on the other of the coast of Greece and numberless small islands that lie between. The remains of the castle are Cyclopean, which means, as far as I can understand, that they were made when people knew how to move big stones, but did not know how to cut them; so they are all piled on the top of each other without any cement between. I suppose they looked much the same in Homer's time, so as he did not know how they were made, he invented the Cyclops to account for them. . . ."

A mission to Scutari, the capital of Montenegro, afforded him an opportunity to take his navigator up the Boyana River with him in a steamboat, and to make a chart of it, for which he received a very complimentary letter of thanks from the Admiral, Sir Beauchamp Seymour. The precise object of the mission has not transpired, but he wrote on the 9th of June:

"I enjoyed my trip to Scutari very much indeed. . . . The mouth of the Boyana forms the boundary between Turkey and Montenegro as fixed after the Dulcigno business, the Montenegrins holding one side and the Turks the other for about 7 miles from the mouth, after which it becomes wholly Turkish. It is a fine deep river about 150 yards wide, with a strong current running out of the Scutari Lake, the town being just at the junction of the lake with the river. The lake is some 25 or 30 miles long, and runs in at the back of Montenegro, so that it forms a kind of back door to that country. As we went up the river

the country got more and more mountainous, and the view of Scutari was very picturesque. The castle is the most prominent object, standing on the top of a steep rocky hill, which rises straight from the river, with white minarets showing from among the trees at its foot as almost the only signs of a town, and a fine range of distant mountains behind forms a capital background. Mr. Kirby Green, the Consul-General, gave us a very cordial welcome, and entertained us very hospitably for the forty-five hours we spent there. . . ."

This concluded his independent cruise, for on the 16th of June, he joined the fleet again. His sight-seeing had been "done" rather strenuously, but he had noted the facts and appearances of places as they were, and though he did not "know the 'Odyssey' by heart," he knew the story well enough to add an interest to his expeditions and rambles. He had made many new friends, official and private, and had acquired information as to the suitability of these places for future exercises.

The fleet, consisting of the *Alexandra*, *Superb*, *Temeraire*, *Thunderer*, and *Invincible*, which were subsequently joined by the *Iris* and *Falcon*, was on its way to the Adriatic, and Wilson, already a *persona grata*, had expressed a wish to join it. A rough diary that he kept at this time records visits to Valona, Ragusa, Gravosa, and Sebenico, and contains entries of having "sent a torpedo-boat to attack the fleet while at evolutions," and "practised signalling with electric light." Another entry that frequently appears is "sent launch to water." This was always rather a hobby of his, born of those watering trips that he used to like when he was a midshipman in the Pacific; and long afterwards, when in command of the Channel Fleet, he would seize on any occasion of a disordered condenser to make a ship obtain her water in this way from the shore.

On the 26th of June, the *Hecla*, having been detached from the fleet, arrived at Fiume, where Wilson received

a very cordial welcome from Mr. Whitehead. An exhibition of a new apparatus for the discharge of torpedoes from ships was about to be given, and representatives from many Governments had been invited to witness it. There were also a new pattern of torpedo, and an improved bow-tube for torpedo-boats, to be tested. While the preparations for these were in progress, a series of comparative tests was carried out between the new torpedo and those carried in the *Hecla*. The principal result of these was the proof of the need for well-equipped torpedo ranges at home and abroad, to promote which, steps were soon taken.

The visit was not wanting in social festivities also, for on 9th of July he wrote to his brother:

". . . I am spending my time here very quietly, going some time or other every day to Mr. Whitehead's works to see what experiments are going on, and occasionally getting a game of lawn-tennis on a gravel court there after work is over. Last Sunday he and Mrs. Whitehead took us for a drive to a villa out in the country at a place called Abazzia, belonging to a Count Corniski. A charming place, with a garden running down to the sea, where it was delightful to sit about until it began to get dark. I find the Whiteheads altogether an exceedingly pleasant family to deal with, both socially and on business.

"Last night our petty officers gave a grand ball on shore to the petty officers and non-commissioned officers of the Austrian army and navy. They invited all the leading officials of the town, and a good many attended. I led off the first quadrille with the wife of the boatswain of the Naval Academy. It is the first time I have seen anything of the sort attempted in a foreign port. There was naturally some difficulty about language, but that did not stop their dancing, and they soon seemed to get on terms with their partners. At supper there were speeches in English and Italian. The cheering, perhaps, came as often as not in the wrong place, but it made none the less noise, and showed good will all the same. I left them to their own devices after supper. I believe they

broke up about four o'clock. Nothing could have been better than the behaviour of our men. . . . To-morrow, if I hear nothing to the contrary from the Admiral, I am going out to target practice, and hope to put into Venice for a couple of days. . . ."

On the 19th of July he wrote again, describing his experiences of Venice:

". . . We have just got back from Venice, where we have been doing two hard days' sight-seeing. It is a town that looks as if it was all back slums and set in the middle of a dismal swamp, and yet, as you may imagine, it is a wonderful place for sight-seeing. Awfully hot though. Fortunately gondolas are cooler than cabs, and the men are charmingly polite, and so don't ruffle one's temper this hot weather. It was pleasant enough in the evening to lie on one's back while the gondola-man paddles slowly down the Grand Canal by moonlight. On Saturday night I went down to Lido, which is the watering-place about two miles off, bathed, dined in the pica, and went to the opera in the open air. The stage is covered, and the audience sit about in chairs all over the ground. We left about eleven, and returned to Venice. . . ."

The *Hecla* returned to Malta, and after ten days spent in coaling and making good defects, was sent for a cruise in the Levant.

". . . I am not sorry, as although this busy little hotbed is cooler than usual at this time of the year, it is too hot for enjoyment. The thermometer sticks at 89° in my cabin. We are to go away by ourselves again. The Admiral goes west and I go east to Salonica, then Smyrna, Rhodes, Marmorice, which is on the coast of Asia Minor close to Rhodes, Adalia, which is still further east, and Alexandretta, which is right up in the corner, then Rhodes again for mails, then Suda Bay in Crete, and back to Malta. A nice interesting cruise, and all new ground to me except Smyrna. I expect to be back at Malta about the 26th September. . . . From Alexandretta we have to fetch a big stone for the British Museum. I do not know

the history of it, but I believe it comes last from Aleppo, before that from somewhere on the Euphrates. . . ."

The diary was neglected during this cruise, but some account of his proceedings appears in the next letter.

"H.M.S. 'Hecla,'
"19*th September*, 1881.

"We picked up our stone at Alexandretta without any difficulty, as it was on the beach all ready for us, and then went across to Ayas Bay on the opposite side of the Gulf for the purpose of getting water from a large river, the Jaipun, that flows in there. I explored the river about twelve or thirteen miles, and shot a wild swan there which proved to be very good eating, but the river itself was very uninteresting. . . . We got some very fair shooting on the opposite side of Ayas Bay to the river—partridges, quails, hares, and francolin, which are like partridges, only rather bigger —but on account of the heat we could only shoot from daylight till about half-past eight or nine. I put in to Larnaca in Cyprus on my way back, and telegraphed to the High Commissioner to ask if I could take anything to Malta for him. I picked up another stone, with a Phœnician inscription on it, for the British Museum at Larnaca. . . . I have not found out much about our Hittite stone; it is a shapeless block, with some hieroglyphics round one end of it. It appears that Hittite hieroglyphics are different from Egyptian, and only lately discovered. A man called Sayce, who is something at Oxford, appears to be the man who is attempting to decipher them. . . ."

The diary was recommenced a few days after arrival at Malta, and there appears in it the following entries:

Saturday, October 8.—Sent three cases of measles to hospital.
Monday, October 10.—Sent nine cases to hospital.

Wilson had a very characteristic remedy for such an epidemic as this, for there follows:

Tuesday, October 11.—Put to sea and stood off and on.

Wednesday, October 12.—Landed two cases and proceeded to Filfulla to fire.

As no further cases are recorded as having occurred, and he notes anchoring in Marsa Scirrocco on the Friday, it may be presumed that his remedy was efficacious, that he had stopped the "rot" by giving his men a change and more active occupation. A similar instance happened some years later at Gibraltar, where he found a boys' training ship landing a fresh batch of cases every day. He watched her patiently for a few days, without applying his remedy, and then, as there was no improvement, sent her to sea to cruise in the Straits, and report her progress daily, with similar beneficial results.

The opportunity of a spell at Malta was taken to put in practice locally the recommendation that he had made after seeing the experiments at Fiume, and after taking the necessary soundings, a torpedo range was established off Sliema.

After a flying visit to Tripoli and Sfax, where he found Captain Tryon looking after British interests while the French were securing their new possession of Tunis, he went for another cruise to the Ionian Islands for six weeks, returning to Malta in time for Christmas. The diary contains notices of visits to Arta, Prevesa, Santa Maura, and Corfu, and of several shooting expeditions, but apparently the "cock" were not in that year.

He remained at Malta throughout January, and at the end of the month wrote:

". . . Captain Tryon goes home to-morrow, having paid the *Monarch* off. I am very sorry he is leaving the station, as he is a man who always took a leading part in everything that was done, and generally did things well. I am glad you are enjoying your fine weather. We take it very much as a matter of course here, but when one thinks of it, it is very charming.

My chimney-piece is lined with flowers, that do not seem to know there is such a thing as winter, and I have never had a fire in my cabin yet. . . ."

The *Inflexible*, the super-battleship of the day, had arrived on the station under the command of Captain Fisher; she had been nearly seven years building, and now embodied all the latest ideas in torpedo equipment, so there was much for Wilson and Fisher to discuss.

"MALTA,
"*21st February.*

"I got back from my trip to Port Augusta on Friday evening. . . . I was only there three days, arriving on Tuesday morning and leaving on Thursday evening. I saw a good deal of Fisher, dining with him one night and he dining with me the other. He had been comparing notes with the Italian big ship, and was very pleased with his own ship in comparison. We got the news of poor Selby's death while we were there. He was a great friend of mine. I am very much surprised at his being attacked by Albanian shepherds, as I have frequently been among them in their own country, and I have never seen any approach to ill-feeling. . . ."

On the 13th of May, the *Hecla* arrived at Spithead to pay off and re-commission with a new crew, and after a busy three weeks at Portsmouth and in London, Wilson got away on a fortnight's leave.

The condition of Egypt for some time past had been a source of much anxiety to the Governments of Europe, and recently her affairs had gone from bad to worse. In May, 1882, there had been a "Revolt of the Colonels" headed by Arabi Bey, and on the 11th of June, a serious riot in Alexandria had caused much loss of life and damage to Europeans and their property, and a general exodus of the foreign population. The country was practically bankrupt and in rebellion.

The British Mediterranean Fleet and a French Squadron had assembled at Alexandria in May, where

the forts were being repaired and replenished, and the Channel Fleet was ordered up to Malta. In these circumstances, the operations, that the *Hecla* had been intended to carry out with the Channel Fleet, were abandoned, and she was ordered instead to proceed at once to Malta. She made a fast passage out, and arrived there on the 1st of July. The Channel Fleet, under Wilson's cousin, Vice-Admiral Dowell, had already arrived, and were preparing to embark troops. One thousand marines were shortly expected in the *Tamar*, but there was no news of what action, if any, was about to be taken, and no one could see what the issue would be. As Wilson remarked, "the Government are making just sufficient preparation to irritate, but nothing approaching what is required if they really mean to attempt to coerce the Egyptians." After a week of uncertainty he received orders to join the Admiral at Alexandria. Leaving that night (7th of July), he hustled his ship along at full speed the whole way, and arrived there half an hour before the bombardment of the forts began. He just had time to visit the *Sultan*, the senior officer's ship of the outside squadron, and get his orders before the ships opened fire.

A minute record of his observations of the events of this day, noted every few minutes as they occurred, has been preserved, with a diary of the principal events up to the 16th of August, but a more general account is furnished by the following letters:

"ALEXANDRIA,
"*13th July.*

"Although by this time you probably know much more about what has been going on here than I do, you will like to have a few lines from me about Tuesday's doings. I played a very inglorious part in the affair, being merely a spectator. It was not a game that the *Hecla* was at all suited to take part in, so the Admiral very properly kept me out of range. We got a splendid view of the whole thing, however, as I had nothing to do but to steam about just where I

liked, keeping a little outside the distance at which the furthest shot seemed to pitch. It is not often one gets a chance of such a perfect view of an engagement without any risk. I thought the Egyptians showed a great deal of pluck. Until their heavy guns were actually capsized or disabled they made a very good fight of it. They had in reality no chance of success from the very commencement, as only a few of their guns could penetrate the armour-plates of the iron-clads, even under the most favourable circumstances, and all of these were very soon disabled. In fact, no armour-plate was pierced at all, though the unarmoured parts were knocked about a good deal. Cabins suffered a good deal. I think in the flagship four of the cabins had shots through them, and the Commander, having a shell burst right in the middle of his cabin, had all his worldly possessions reduced to chips in a moment. I could form no estimate as to the loss of life on shore, as they kept generally, of course, under the cover of the parapets, except when one occasionally got a glimpse of them at an embrasure while they were loading their guns; but the guns against them were so heavy and the shooting so straight, that I think they must have suffered heavily. I must say I was astonished at their showing fight at all. I thought that they would have abandoned the sea fortifications at once, as they knew we had no force that could touch them beyond the range of the ships' guns. I suppose by the conditions under which Arabi holds his power he was obliged to try and show that the army was invincible, but he certainly made a great mistake. There is no inclination to show fight anywhere within range of the ships' guns now. To-day the Marines landed unopposed and took possession of the peninsula called Ras-el-Tin, which forms the outside of the harbour, and they are making their way to some extent through the town; but it is still burning, and I fear will be for some time to come a horrid scene of pillage and murder. I was in great luck to arrive in time, as I only got in half an hour before the action began. . . ."

The next letter opens with a message to a friend, Mr. Amos, to confirm a telegram he had sent him

about the destruction of his house and office. It then proceeds:

"ALEXANDRIA,
"*20th July.*

". . . We have had a period of almost incessant hard work since the bombardment, but no fighting. My work has been, first, spiking or disabling all the guns in the outlying forts, which cover an extent of 8 or 9 miles, and afterwards searching for magazines and destroying ammunition. I suppose the Admiral thinks I have a good nose for explosives. There is an enormous store of ammunition in the principal magazine that I have been working a whole week to get rid of, but I am not allowed to blow it up, and I have to carry it half a mile to throw it into the sea. Before order was re-established in Alexandria I managed to get a large quantity of it carried down by the Arabs simply by sitting down in the middle of the high-road with three or four bags of biscuits and a few bluejackets to show what I wanted, and bribing the passers-by with biscuit to carry it down for me. Now, however, they have all flocked into the town, and I can get very little help. Yesterday I came across an enormous store of torpedoes, which fortunately for us they did not use. Probably they did not know how. When I said we had not sufficient force I never considered the forts of Alexandria as coming into the question. I never thought they would show fight at all. Arabi has played our game in the kindest manner in the world. If he had only the sense to keep his men under cover and not fire a shot, we could never have landed with the force we had. I think, even if we did not mean to go on to Cairo, it was wicked to bombard the forts without a garrison ready to replace the one driven out. The whole of the pillage and murder and incendiarism which went on through Wednesday and Thursday night might have been saved if we had had a force on the spot to take possession as soon as the firing ceased. The town is now perfectly safe, and both natives and foreigners are flocking back to it, but the question of the food supply must soon crop up if Arabi keeps the communication with the rest of Egypt cut off. We hear rumours of his men deserting him, and if

so, things may settle down quietly ; but if not, I can see nothing for it but a march on Cairo. . . . You will probably have seen by the papers that I lost one of my lieutenants by accidentally shooting himself. He is a very great loss to me, as he was a capital fellow. . . ."

"H.M.S. 'Hecla,' Alexandria,
"*26th July*, 1882.

"I have had my hands very full of work, principally in destroying the Egyptians' powder and torpedoes, but they have such enormous stores here that it is a very long job. I have destroyed more than 1,000 torpedoes and at least 300 tons of powder. I think all the torpedoes are destroyed now, but there is any amount more powder. They have also converted the *Hecla* into a magazine, so that I have to keep all the other ships supplied with ammunition. I had an interesting little trip yesterday that gave me just a look at Arabi's outposts.

"I was on board the *Helicon*, just going to luncheon with the Admiral, when a message came from the General to say that there was a strip of land between Lake Mareotis and the railway embankment that Arabi might possibly advance by, and which his troops could not command, and asking if we could help him with any force on the lake. No one knew whether there was depth of water enough in the lake or not, but I offered at once to prepare a raft to carry two gatling-guns, and to go and see what could be done. I then went back to my ship to start Norcock getting the raft ready, and then came back and went with Fisher to explore. We got a truck and put two gatling-guns on it in front of one of the railway engines and started away down the line, until we found ourselves at the beginning of a causeway with a marsh on one side and the lake on the other, and could distinctly see Arabi's troops posted at the other end. They turned out in a hurry and lined their parapet but did not fire, and we had no object in firing at them. Fisher remained with the engine, keeping the guns bearing on them in case they attempted to advance, while I went down and waded about half a mile into the lake. The water, however, was nowhere up more than half-way to my knees, and even Brandy [his dog] who came with me

could not find enough to swim in, so our scheme had to be given up.

"We were so pleased with our armed railway-truck that we have set a party to work this morning to armour-plate it with some iron plates we found at the railway station, and sent word to the General that we had got an ironclad on the railway to defend him. One of the lieutenants of the *Invincible* has got charge of it now, and I think it will prove very useful if we ever attempt an advance from here.

"We have no idea what they are going to do with regard to sending more troops. . . . In the meantime Arabi has dammed up the canal so as to cut off our main water-supply, which will in a short time cause a great deal of misery in the town, though it will not affect us because we can condense.

"William Dowell is round at Aboukir, very anxious to bombard the forts if he is only allowed. I saw him for a few minutes the day before yesterday. He had come round thinking the 48th had arrived with his boy Jack. They will not, however, be here till to-morrow probably."

"ALEXANDRIA,
"*5th August.*

"I have been hard at work since I last wrote, partly in destroying powder, etc., partly in arranging for the supply of ammunition to our own ships, and latterly in mounting a 40-pounder gun on the railway, which I have to-day had an opportunity of bringing into action for the first time. I said in my last letter home, which I hope was forwarded to you, that Fisher and I had put our heads together and supplied the General with an ironclad truck armed with gatlings, which he was much taken with, and this led up to the idea of mounting a heavy gun in the same way. I had some trouble in persuading the Admiral to let me try, as of course, as in duty bound, he foresaw all sorts of dangers and difficulties. I first arranged it so that I could hoist the gun out and fire it on the ground alongside the railway, but that took more than half an hour, and in case of a reverse there was every chance of being cut off. So I determined to try mounting it on the truck, so that it could be fired there. When I had got it ready yesterday afternoon, the General came out with me to see it fired, and as soon as he saw it he

said, 'Oh, it is sure to smash the truck all to pieces.' We fired two rounds and nothing happened, so he quite altered his opinion and went away delighted. To-day my gun was put in front of the train which took him out to fight, and I think on the whole did good service; at all events, nothing went wrong with the gun. As Arabi had pulled the rails up, and we had not time to lay them down again, I could not get nearer than 2,300 yards, and the enemy kept so well under cover that it was very difficult to tell what effect the shot had. I was firing nearly the whole time over the heads of our own men, so it was rather nervous work. My heart was in my mouth once when one of the shots stripped and I heard it turning head over heels in air as it went along. Fortunately it fell just beyond our men and hurt no one. I don't know in the least what the result of our afternoon's work has been. It has certainly shown that Arabi has a very strong position, and means to hold it. I don't think we can drive him out of it with our present force. I thought the Marines who were in front of me behaved exceedingly well; nothing could have been steadier than they were. The artillery fire opposed to us was very weak, only one shell pitched close to us, and then just as we thought they had found our range they left off firing, and I don't know what became of them. . . .

"It is high time to go to bed now, as I want to be up at daylight to have another trip in the train to see that Arabi does not pull up any more rails. . . ."

On the 10th of August, Sir John Adye arrived, and the diary records several distinguished visitors to see the new train.

"H.M.S. 'Hecla,' Alexandria,
"*10th August*, 1882.

". . . Our armoured train is in constant requisition, and judging from the number of Correspondents who come to see it, I think you will see full descriptions of it in the papers, and pictures as well in the illustrated ones. We go out every afternoon to see what Arabi is doing, but as a rule without firing. On Monday we wanted to find out exactly where his guns were placed, and as he sent out a long line of skirmishers to meet

us we fired a shot at them. It was a very bad shot, as we had misjudged the distance, and it went a long way over their heads, but the whole line of skirmishers disappeared like magic, running like rabbits into their holes. The shot had the desired effect, as all their guns opened fire, and rocket-batteries as well. We just stopped long enough to note the positions of the guns, and then gave them another shot, a much better one than the first, and then moved off. In the middle of the night I got a message from Fisher, to say the General was going to place some guns in a position he had asked him to occupy so as to prevent Arabi from pulling up the rails, but as he did not know how he was to get them across the canal, he had sent to Fisher to ask for help. We were to start with our train at six a.m., so there was not much time to spare, and I lay awake half the rest of the night thinking where I could lay my hands on any materials for building a bridge. At four o'clock I collected four big packing-cases, some railway irons and planks in the railway station, and got away with our train half an hour late, but still before the soldiers were ready to start. On arrival at the place we found a ferry-boat which with careful management could just be made to take the guns across, but the operation would take a long time, and the position would have been of very little use if they could not advance their guns quickly when they liked, so we decided to use the ferry-boat to get the guns across, but to build the bridge all the same. Fisher took charge of ferrying the guns, and I set to work to build the bridge, while the soldiers sat down under the trees and looked on. It took us all day to build the bridge; the canal is 68 feet across—not quite as wide as the Cam, I should think. I was very well satisfied with its strength when it was finished, except that the mud is very soft and it may gradually settle down. The General came up just as it was finished, and was very grateful. I suggested to him that he ought to hire the ferry, as the poor old ferryman was quite thrown out of work by the bridge, and he promised to do so. We went out and had another look at Arabi last night; he has paid me the compliment of throwing up an enormous bank of earth across the front of the spot our 40-pounder was firing at on Saturday, which seems a sign that we did him

some mischief. . . . I am inclined to think Saturday's business was a mistake on our part, as it has taught him his weakest points. . . ."

"H.M.S. 'Hecla,' Alexandria,
"*14th August.*

"We have now got seven Generals here, and not one of them has the most remote idea what we are going to do. It is to be hoped that Sir Garnet, who is due to-morrow, has the plans in his pocket, because we are simply wasting time now, and the worst of it is that Arabi is making the best use of his. . . . The troops are arriving fast, and the Naval Brigade, with the exception of two field guns and the armoured train, have returned to their ships, very unwillingly. I should have liked them to have stopped until they had seen the inside of Arabi's present position, but I suppose in view of the possibility of trouble with France it is not thought right to keep the men long out of their ships. Possibly it may mean attacking Aboukir, which will gladden William Dowell's heart. It would be of no use by itself, but if done simultaneously with an advance either from this side or the Canal, it would make a very good diversion."

He thus foresaw the possibility of the stroke that was intended, but which was so well kept secret. Sir Garnet had not arrived, and in the meantime all these preparations at Alexandria were so much to the good. The letter continues:

"Yesterday I had a little miniature battle of my own, which arose out of my work in destroying explosives. On Saturday I sent Norcock with a party of twenty-six men to burn a store of guncotton about 1½ miles outside our lines beyond Mex, Lord Charles Beresford, who knew the place, going with him. They burnt one store and were just ready for burning another when the outposts reported a large body of men advancing. They proved to be 300 or 400 Bedouins with some cavalry, and they were coming on very fast. Beresford and Norcock wisely decided that the best thing they could do was to retreat to their boats without firing, lighting the fuze to burn

the guncotton before leaving. This burst into a furious blaze just as the Bedouins came up. As I was at Ramleh with Fisher quite in the opposite direction, I only heard of this when I came on board in the evening. As there was still another store of guncotton to be destroyed, and worse, a large store of mechanical torpedo primers, just like Wilmot blew himself up with, that would most likely be used to set traps for us in front of their fortifications, I thought we ought to finish the job as soon as possible, so I went down to Mex as soon as it was daylight, roused up Beresford and Colonel Le Grand, who was in charge there, got two companies of Marines and a 7-pounder gun and rocket, that Beresford had cleverly mounted on country carts, and sent them round by an inland road. We arranged that when they arrived at the place they were to be put as much out of sight as possible, and then Beresford was to show himself on the crest of the hill as a signal to me to land with the same party that were with Norcock on Saturday.

"As we had to pass through a village we thought most likely the villagers would give information to the Bedouins, and they would think we only had the same strength as before. The ground was very broken, being old quarries, so we had no difficulty in hiding our men, and as it was a strip of land about half a mile wide between the sea and the lake, we could command the whole of it. Well, we burnt the guncotton store, and then went to look at the store of primers. It was evident at once that some had been taken away. Norcock, being a careful man, had counted the cases overnight, so we counted them again, and found fifty-four missing. After a short search we found fifty in a ravine close by; four had been carried off, and they evidently meant to come back for the others. We carried them all back again, and had just finished when one of the sentries reported horsemen advancing along the lake on our left. I intended to let them come close up and catch them, but the impatient Marines opened fire too soon, before I could get up and stop them; seeing them turn back, Beresford opened fire with his 7-pounder, and I believe knocked two of them off their horses, but they were soon out of range again. Then we saw the

skirmishers on foot creeping round to the right and trying to come up behind a railway embankment that ran along the seashore, but two Marines stationed to protect that part fired and turned them back. They kept dodging about, occasionally firing at us from behind different rocks, but at very long range, and the bullets nearly all fell short. I stopped the firing on our side altogether in the hopes of drawing them on, but they were not to be tempted. In the meantime Mr. McDonnell, the gunner, had burnt the store of primers, and the Bedouins gave it up and moved off. It was a very interesting day to me, but much more like a sham fight than a real one. . . ."

"H.M.S. 'Hecla,' Alexandria,
"17*th August.*

". . . Sir Garnet was all yesterday holding a council of war, but nothing has yet transpired as to his plans. . . . You ask me whether the train is my invention or Fisher's. I am sure I cannot tell you, as almost every step has been the result of consultation between us; but the really hard work connected with it, which was persuading the authorities to let it be tried, is entirely his, as, of course, is all the responsibility. The plans for mounting and working the 40-pounder are mostly mine. . . ."

"18*th August.*

". . . At present we know nothing of Sir Garnet's plans. He is evidently a man with a mind of his own, who does not on these occasions take the world into his confidence. My orders are to be ready for sea at five o'clock to-morrow afternoon, and I have stores on board for Port Said, but that is all I know. I am leaving my gun behind on the train. I was told this morning to leave it for a crew of the *Invincible*, but I thought it was nearly as bad as giving it up to the enemy to turn it over to a strange crew, so I have now got leave to leave Davison and seven men behind, so that all the principal people will remain the same. . . ."

The secret was not out yet, for the next afternoon and evening the ships in Aboukir Bay were surprised to see a long stream of transports arrive and anchor

in the Bay, and expectations ran high in the ships there of orders to land the next morning. It was only a feint, for by midnight every one of the transports had sailed for Port Said.

"H.M.S. 'Hecla,' Port Said,
"*24th August.*

"Since we came here and all the transports have passed up the Canal we know very little of what is going on. My little ship's company is a good deal scattered, so that I have representatives everywhere, but I hear nothing from them. . . . I have sent two torpedo-boats to Ismailia while I am here. The operation of taking possession of the Canal seems to have been exceedingly well done, and a great deal of fighting, as well as international complications, saved thereby. There has been a good deal of delay on account of transports running aground, but not more than was to have been expected, and as the Canal Company recovered from their sulks as soon as they saw that we really had possession, and put their pilots at our disposal, things are going smoothly enough as far as we can see from here now. My first job on arrival was to lay the shore end of the telegraph cable from Alexandria, not a very warlike operation, but it entailed a good hard twenty-four hours' work for our men; then I thought we should have a very easy time of it, but last night some Arabs brought in a report of an intended attack on us from Fort Ghemih (?), about six miles to the west. As Fairfax, who is in charge of the place, was very busy, the Admiral sent for me, and asked me to take charge of strengthening the defences on that side. . . . Fortunately I had borrowed a horse in the afternoon, and had ridden over the ground and made up my mind what ought to be done, though with no idea then that I should have to superintend it, so I got leave from him at once to shift our lines outside the Arab town. We landed shortly after eight o'clock with all the spades we could lay our hands on, and by ten we were comfortably entrenched, as the sand was easy digging, sentries posted, and the men stretched out; and, if they followed my example, enjoying a very comfortable sleep on the sand, which was almost as soft as

a feather bed. . . . I am sorry to say that Fisher, who was my best and strongest ally, is down with fever. I believe he is getting better, but his ship is far off, and I cannot go and see him. . . ."

The canal having been thus seized, notwithstanding the probable international complications that might ensue, the Navy ceased to take any share in the actual fighting, beyond landing a small brigade. The base of the Expeditionary Force was moved from Alexandria to Ismailia, and Lake Timsah, an open stretch of water in front of the latter town, became crowded with the shipping carrying the Army and its stores. These were being landed with the utmost despatch under the directions of Captain Harry Rawson, and troops pushed forward to seize Kassassin, whence an attack could be delivered on the earthworks that the Egyptians were erecting at Tel-el-Kebir. As soon as the congestion of shipping in the lake was relieved, the *Hecla* was directed to proceed there, and Wilson was ordered to take charge of that section of the Canal Guard, where the Bedouins had been giving trouble by "sniping" boats as they passed to and fro. He had two interesting guests with him for a few days, Colonels Redvers Buller, V.C., and Charles Warren, the latter of whom had come out to try and make use of his intimate acquaintance with the Bedouin tribes in discovering what had become of Professor Palmer and his two companions, Captain Gill and Lieutenant Charrington, who had gone on a mission to purchase camels in Arabia.

As he had landed a couple of field-guns for the defence of the town, he would not ask leave to go up to the front to see the battle, but he sent Norcock, the first lieutenant, up the Sweet Water Canal with a boat-load of guncotton, to destroy the dams that the Egyptians had made to cut off the water supply.

The battle of Tel-el-Kebir was fought on the 13th of September, and on the next day he wrote:

"The wind-up of this business seems to have been exceedingly brilliant, as we hear to-day of Cairo being occupied and Kafr Dawar surrendering. . . . I have just had an account of the fighting at Tel-el-Kebir from Admiral Hoskins, who was up there, but you will see so much better ones in the papers before you get this that I need not detail it. The whole thing seems to have been well planned and well carried out. Poor Wyatt Rawson is, I am sorry to say, badly ill, and I fear is not likely to live. You will remember him as a small boy going for a pull in the skiff with us up to Porchester from the *Excellent* one afternoon. He has turned out a wonderfully good man in every sense of the word, and will be a great loss. . . ."

On the 18th, he wrote again:

"I am re-embarking my guns and collecting my boats, and start for Port Said to-morrow or next day. I have just got back from Tel-el-Kebir, where I went to see the battle-field, and I have come back much impressed by Sir Garnet's boldness in deciding to rush the lines in the way he did, and his skill in the way it was carried out. It seems to have been done exactly at the right time with everyone in the right place, which is very unusual in battles. I went up in my gig by the Sweet Water Canal, and slept on the bank at Kassassin, and got to Tel-el-Kebir about eight o'clock in the morning. We walked all over the lines some three miles or so in length, and it was well worth doing, although the heat, stench, and flies made it anything but pleasant. I jumped into the ditch and found it not very easy to get out again, even without anybody on the parapet to stop me, but I suppose our men helped each other up. . . ."

Military operations ceased with the fall of Cairo, the Khedive was able to return to his capital, and the services of the Navy on shore were dispensed with. The ships, accordingly, collected the remaining scattered units of their men and guns, the Channel Fleet went home, and the *Hecla* sailed on the 26th for Malta, to go into dock and refit.

It is forty years since these events occurred, and

to quote a favourite phrase of Lord Fisher's, the mountains of the future have become the molehills of the past; but the negotiations which preceded these events had involved us in a long and bitter dispute with France, who had undeniable claims to a share in the restoration of the country. This, and the vested interests of Turkey and others, with the consequent restriction of aims and tentative measures, had produced an intolerable confusion, and our action in solving it was tersely described by Wilson a few months later, when commenting on the advice, "When in doubt, fight," given by Lord Alcester to his hosts on the occasion of a farewell dinner, "To my mind," he wrote, "it represents the only reason there was for fighting. Matters had got so confused that it was necessary to fight to make a fresh start."

The events of the past two months could not but have had a lasting influence on the future thoughts and opinions of a man who had been so closely associated with them, and the letters which have been quoted in the last few pages are of particular value in indicating the opinion he had formed of the operations regarded as military measures, and as further displaying a remarkable fertility of resource, and a physical strength that knew no fatigue. Another feature is worthy of note. Though he had foreseen the possibility of a flank attack on the enemy's position from the canal, he had quite failed to guess Sir Garnet's intentions; but when these were developed, and their success was seen to have depended so much on the secrecy with which they had been guarded, he did not fail to express his approval. This experience was probably not without an influence in the development of that habit of reserve for which he was afterwards so much noted.

When the list of honours and rewards was published after the close of the campaign, it was observed that Wilson's name was not mentioned, notwithstanding the distinguished part he had played in its early stages;

the following extract from a letter from Admiral Dowell to Wilson's mother is, therefore, inserted, to show what his brother officers thought of the omission:

"H.M.S. 'MINOTAUR,'
"*28th November.*

". . . All naval men connected with the Egyptian business feel alike that Arthur has been very improperly passed over in the distribution of honours. An Egyptian or Turkish order, of course, he will get, but I do not take that into account. It was no surprise to me that his name was not among the C.B. list, for I had argued the matter out at the Admiralty before—of course it was no business of mine, as he was never in any way under my orders—but I had gone to Sir Cooper Key about two of the Channel Squadron . . . and I took the opportunity of asking what was to be done for Arthur, and was told 'Nothing;' but that they thoroughly knew what very good service he had done, and that he would be perfectly certain of having good appointments, but that his case in no way came within the Statute of the Order of the Bath. Sir Beauchamp knew his value—his answer to me once when I spoke to him—'Do not I know Wilson? There is nothing I ever wanted him to do that he has not done, and done well;' and Captain Fisher, who is here dangerously ill, I am afraid did himself no good yesterday; he got so excited, they tell me, when speaking of Wilson's having been left out. . . . Arthur will benefit eventually; for the present, I fear you must be satisfied with the knowledge that his brother officers all feel that he merits the reward that he has not got. . . ."

The refit at Malta was completed in three weeks, and at the end of October, the *Hecla* was back again at that sink of iniquity, Port Said, where Wilson had the uncongenial task of preserving good order.

"H.M.S. 'HECLA,' PORT SAID,
"*24th October.*

"I was only one day at Alexandria, and then came on here, where I am now Commandant with a garrison of 240 Marines, who do both the garrison and police

work until Baker Pasha can establish some sort of force, Egyptian or foreign, to take their place. I got myself into hot water with everybody in this country by giving a passage from Malta to a Mr. Broadly, who is the lawyer retained to defend Arabi. They are all so bloodthirsty they want him shot at once without a trial. I should like to shoot him, too; but there are so many other rebels in high places in England that I should like to shoot first, and, as rebels go, I think Arabi is rather a good sort.

"At present all my time is taken up with questions of leases, and rent, and water rates, and rights of way, and such things. I am meddling, I need scarcely say, with things I know nothing about. Things that, for all I know, go off if you touch them; but the Government have gone and bought a property here for £76,000, and there is no one here to look after it but the Senior Naval Officer. . . ."

"PORT SAID,
"*2nd November.*

"My reign will finish here about next Wednesday. I shan't be sorry to go. It is a remarkably dull place. If I had not got my torpedoes to play with, I do not know what I should do. We have got a population of about fifteen thousand here, mostly scoundrels I think, with a constant stream of drunken merchant seamen of all nations steadily flowing through to vary the monotony; but even with all that entertainment, the place cannot be called lively. The Marine Artillery make capital police and keep very good order. This week we have had a murderer to hang, all the Arab coal-heavers on strike, and the coal stores on fire, but even that doesn't make it interesting. The Egyptian Governor governs the place, but as I have control of the garrison and the police, he cannot do much to enforce his orders without coming to me. We arrest all offenders and turn the natives over to him, and foreigners generally to their own consuls to be dealt with. At present I have had no trouble or difference with any of them. . . ."

On the 6th, the *Invincible* arrived to take over these duties, and the next morning the *Hecla* started for Corfu and Fiume.

The purpose of his visit to Fiume was to witness the performance of a new pattern torpedo, and as soon as this was completed he returned to Malta, and remained there for the rest of the winter. In February, 1883, after the carnival, he had gone round to Marsa Scirocco, at the south-east corner of the island, where there was more room and less distraction than in Valetta, to carry out some of his perpetual experiments with the torpedoes, when an incident occurred which afforded him an opportunity to carry out a smart piece of rescue work.

"H.M.S. 'HECLA,'
"*1st March.*

". . . Yesterday forenoon a merchantship's boat came into harbour. As there was no ship visible from which she could have come, I sent a boat to find out where they had come from, and what was the matter. I found they had left their ship about sixty miles south-east of Malta in a nearly sinking condition, and that another boat had left at the same time, but they had seen nothing of her since. I telegraphed at once to the Admiral, and got ready to start. I got the answer 'Go immediately' in about an hour's time, and in five minutes more I was off. I thought from the account of the condition in which the ship had been left, about thirty-six hours before, there would be little chance of finding her afloat still, and there is no saying where a ship left to herself will drift to, so I could only make a guess as to her whereabouts and go zigzagging about, taking about fifteen miles each sweep. We saw nothing till this afternoon, when we picked up the boat with the remainder of the crew, thirteen men, about fifteen miles further off from Malta than when they had left the ship. . . . As I had got all the crew, and it seemed hardly possible the ship could be still afloat, I gave up the search as soon as it got dark, and I am now on my way back to Malta. . . ."

He was evidently pleased with his success in finding those men, for he referred to the subject again in a letter of a week later to announce his approaching return to England in the ship.

The *Hecla* arrived at Spithead on the 31st of March, and after a short period at Portsmouth, was attached to the Channel Fleet for a course of exercises in mining and countermining at Berehaven.

The current idea of the day was that a fleet should be able to protect with its own resources any port that it might have to seize as a temporary base, and all heavy ships were supplied with a small outfit of mines and stores to afford the means of practice in peace, and, by the combination of several ships, provide the means to lay a mine-field, or to countermine that of an enemy in war; but the use of these new weapons was far from being understood or practised, as Wilson in a previously quoted letter had urged that they should be. Torpedo lieutenants were still too scarce to allow of more than one to a fleet, and they had not enough influence to overcome even the inert resistance of an established routine. It must, therefore, have been with particular satisfaction that he now received orders to draw up and submit a programme for such a course of exercises. He prescribed a full curriculum. First, a defensive system of observation mines in the fairway to and from the sea, with contact mines on either side of it, which was to be tested by the ships passing over it; then the construction and laying out of a boom, to be followed by the offensive operation of destroying it; of creeping and sweeping for the enemy's cables and mines; and, finally, of running lines of countermines. Mistakes and faults were many. Mines were laid out of place and leaked, had to be weighed, repaired, and correctly laid, junctions were faulty and cables had to be "under run," the fault located and made good; but Wilson was the personification of patience in such circumstances, and eventually got it all right, and succeeded in giving a good demonstration of what could be done and how to do it.

Towards the end of November, 1883, the *Hecla* returned to the Mediterranean, and after a short visit

to Fiume to see Mr. Whitehead's latest improvements, proceeded to Malta.

Some two years previously, a revolt of the tribes in the Soudan had broken out under the Mahdi, and it had now reached proportions beyond the power of Egypt to suppress. An expedition under Hicks Pasha to preserve the provinces round Khartoum had been annihilated in November, and on the advice of the British Government, it was now decided to withdraw the garrisons, and to evacuate the country beyond Wady Halfa on the Nile.

The revolt had spread to the Red Sea littoral, where Osman Digna, a prominent slave-dealer at the little port of Suakin, who had been created Emir of the district by the Mahdi, had invested the two neighbouring Egyptian garrisons of Tokar and Sinkat. The Khedivial forces sent to relieve them had been destroyed by the rebels, and it was not expected the two places could hold out much longer. A more determined attempt to relieve Tokar was therefore undertaken by Baker Pasha. With ten other British officers, and a mixed force of Turks, Egyptians, and Soudanese, he left Trinkitat, on the coast, about 40 miles to the south of Suakin, and on the 4th of February, was utterly routed at El Teb, the site of some wells about 11 miles inland. This disaster placed Suakin in danger, and a small force of blue-jackets and marines was hastily landed from the ships there, to hold it until reinforcements could be collected.

The situation was critical, but on receipt of the news the British Government acted with laudable promptitude. A battalion of marines was sent out from home, regiments on their way to and from India were diverted to Suakin, and the Marine detachments of the Mediterranean ships were ordered to be sent there. The *Hecla* was lying in Malta Harbour, and at 2 a.m. on the 8th of February, Wilson received orders to proceed at once with these 240 officers and men to

Port Said. Leaving at 11 a.m. the same day, he reached Port Said on the 12th, transferred the marines to the troopship *Orontes*, and embarked in their place 170 men homeward bound from the *London*. On the 16th he left Suez with a small tug and four water-tanks in tow, and after five days' constant trouble with these vessels and their tow-ropes, he sighted a ship on shore among the reefs, and at once stood in to her assistance. It was an uncharted coast, abounding in coral reefs, and needing great caution in navigation; but on finding the ship to be the *Neera*, with the 19th Hussars on board with 270 horses and mules, and the ship hard and fast ashore, he went close in, and proceeded to disembark them into his own ship and one or two other vessels that had come up. While he was on board the *Neera* directing this work, the *Hecla* fouled her screw, and drifted on to one of the numerous reefs, but he quickly got her off by making sail. She was undamaged, and as soon as the screw had been cleared, he proceeded for Trinkitat, which he reached on the evening of the 23rd. By this time there had been assembled here a force of some 4,000 men under the command of Major-General Sir Gerald Graham, with which a further effort was about to be made to relieve Tokar, and efface the results of the previous failure. On the afternoon of the 28th, the expedition moved out to Fort Baker, and on the next morning continued the advance on El Teb, when there occurred the events described in the following letter:

"H.M.S. 'Hecla,' Trinkitat,
"*29th February.*

"I have just got back from a very pretty little fight, which you will have heard all about by telegraph long before you get this. I had no business there, but as I had nothing to do here, and the place where the battle was expected to, and actually did, take place was within walking distance, I thought I would walk out at daylight this morning in time to march out with the troops. We had sent twenty-five men with Cony-

beare and Henderson and a Gardner gun to represent the ship in the Naval Brigade, but I had nothing to do with that, and simply went as a spectator. I am afraid you will say I had no business to go, but it would not do to miss such a good chance of learning one's trade, and it was a most enjoyable day. I would not have missed it for anything, and as I was free to go where I liked, I saw all the best of it. We went out in square, with all the impediments, including myself, in the centre, the Naval Brigade with their machine guns occupying the two leading corners. We could see the enemy in the hills in the distance before we had left Fort Baker more than about a mile, but as we approached they all disappeared, and we saw nobody —nothing but two Krupp guns, which they had captured from Baker the other day, looking over a sort of parapet at us. We marched steadily past them, as if we were going to leave them on the left, and still we saw no sign of the Arabs until we were nearly abreast of the battery and 900 or 1,000 yards from it, when they opened fire with their Krupp guns and with rifles. We marched steadily on without replying until we were right behind them, and had them between us and where we landed. Then we halted, and for some little time a sort of duel was kept up between the Royal Artillery with their 7-pounders and the Krupp guns in the fort, the naval machine guns occasionally joining also, but with no result of any importance on either side except occasionally a man or a horse being struck in the square; but most of the shots were kind enough to pass through without hurting anybody. When we had had enough of that the General gave the order to advance, and the men marched at first very steadily without firing. At about 500 or 600 yards firing commenced, and then there was a frantic noise and shouting. Poor Lieutenant Royds of the *Carysfort* was shot through the body close to me and two or three men of the Naval Brigade, not, however, belonging to my own ship. I went on with the 65th Regiment, who were making straight for the battery of Krupp guns which had been pounding us; when we got within twenty or thirty yards a lot of the men broke their ranks and rushed ahead to get into the battery. The first man, however, had scarcely put his head over the parapet

CAPTAIN WILSON AND THE GARDNER GUN'S CREW, H.M.S. "HECLA":
LANDED AT TRINKITAT AND SUAKIN, 1884.

than back they all came, with about twenty Arabs with their spears close after their heels. I stopped two or three and made them turn about, and one poor man said rather piteously, 'Don't stop me, sir, I am wounded,' and I saw he was wounded in the elbow. The greater part of the Arabs were shot almost instantly, but the rest came on without the slightest sign of fear. One of them tried to run his spear into the soldier next to me, but missed him. I tried to run him through with my sword, but it broke, and while my attention was taken up with this man, another came up and cut me over the head with a sword. Thanks to my pith helmet it only made a nice clear cut through the scalp, and did not hurt the skull; in fact, I hardly felt it afterwards. But the blood ran all over my face and clothes, and as water is too scarce in the desert to be used for washing purposes, I looked rather an object, and all my friends kept thinking I must be badly hurt. I picked up another sword, but got no other opportunity of using it, though the Arabs came on in the most plucky manner. They would lie hidden in ones and twos under the scrubby bushes on little sand hillocks until we were within a hundred yards of them or less, and then they would spring up and run straight at us with their spears, of course generally to be shot before they had come far. They had any amount of rifles, and fired at us at long range, but they evidently thought the spear was the weapon for close quarters. They were certainly the most fearless creatures I have seen. One felt quite sorry such brave men should be killed, but there was no help for it. If they only learnt to use their rifles in the same fearless way they use their spears I don't think our men would have had much chance with them. I came back to the ship in the afternoon and convoyed poor Royds, who was very badly hit, and as it was dark before we got back and the last part of the way was knee-deep in stiff clayey mud, it was rather a job for the men to carry him. My head is done up with sticking-plaster and is all right. . . ."

Such is his modest account of a very gallant personal action, performed in the course of a fight that was desperately maintained for three and a half hours.

As far as he was concerned, with the return to his ship, and the writing of his letter to his friends, the incident was closed, and he dismissed it from his mind; but Redvers Buller, one of the Brigadiers, had seen what occurred, having been just behind him at the time, and on the next day reported it to Sir Gerald Graham in an official letter as follows:

"TEB,
"*1st March.*

"I have the honour to bring to the notice of the Major-General Commanding the following distinguished act of bravery which came under my observation yesterday, which I would recommend as worthy of being submitted to the Lords Commissioners of the Admiralty for the distinction of the Victoria Cross.

"Captain Wilson, R.N., of H.M.S. *Hecla*, on the staff of Rear-Admiral Sir William Hewett, V.C., K.C.B., attached himself during the advance on the Krupp battery yesterday to the right half battery, Naval Brigade, in the place of Lieutenant Royds, dangerously wounded.

"As we closed on the battery the enemy moved out on the corner of the square and upon the gun detachment who were dragging the Gardner gun. Captain Wilson sprang to the front and joined for a second or two in single combat with some of the enemy, protecting his detachment till some men of the York and Lancaster Regiment assisted him with their bayonets.

"But for the action of Captain Wilson I think one or more of his detachment must have been speared.

"Captain Wilson was wounded, but remained with the half-battery during the day."

The Press Correspondents had also described the incident in their accounts of the action, but in more glowing terms than he had permitted himself to use, and embellished with certain fabulous details, so that the mail that carried back these accounts to the front, brought him a shower of congratulations and praise from relatives, friends, and old shipmates. He had already learned that he had been recommended for

the V.C., but he took it all very modestly and coolly, and wrote to the Captain of the *Vernon* his own version of the story, which, though it is largely a repetition of that already given, contains some details, and a statement of his view, which must not be omitted.

"Off Suakin,
"*Friday, 21st March.*

"Dear Markham,

"Thank you very much for your kind note, and will you also thank Durnford for his congratulations and the good wishes he sent me from the gunners and others of the *Vernon*. The papers have only arrived to-day, and I see they have been telling wonderful sensational stories about me. What really happened was this: When we got within thirty yards or so of the battery where the Krupp guns were, about a dozen of the 65th, evidently thinking the place was deserted, rushed forward out of the ranks, but they no sooner looked over the edge of the parapet than back they came with twenty or thirty Arabs after them. I stopped two or three of the soldiers, and made them turn round and face the Arabs, the greater part of whom were shot before they got to close quarters. One fellow got in close to me and made a dig with his spear at the soldier on my left. He failed to reach him, and left his whole side exposed, so that I had a cool prod at him. He seemed to be beastly hard, and my sword broke against his ribs. The man on my right was a plucky fellow, and collared him round the neck and tried to throw him. The Arab still held on to his spear, so I hacked at him in a futile kind of way with the stump of my sword, and while I was doing so a second Arab came up and hit me over the head with a sword. My pith helmet took the greater part of the blow, so it only just cut the scalp, and I hardly felt it. Both Arabs were shot and bayoneted on the ground almost instantly. If I could only have got a basin of water and washed my face I should have escaped notoriety, but I only had a little cold tea in my waterbottle, and until we got to the wells there was no water to be got, so the blood ran all over my face, and the Correspondents spotted me. General Buller, who was

close behind, congratulated me in his cheery way, and he has since recommended me for the V.C. It has been a wonderful piece of luck, as I only walked out in the morning as a loafer just to see the fight. The Admiral has, however, since put me down as accompanying him. Nothing was further from my thoughts than going in for distinction of any kind, but as I happened to stumble into a hot corner I could not possibly have done anything but what I did, unless I took to my heels. . . . I have given you a long yarn about myself. I hope you will show it to anybody you think it will interest.

"Believe me,

"Yours very truly,

"A. K. WILSON."

On the rout of the Arabs, the expedition advanced, and reached Tokar the same afternoon without further opposition. The garrison having already surrendered, the civilian population were brought away, and on the return of the troops to Trinkitat, the whole force was embarked and conveyed to Suakin.

Sinkat had also fallen, but operations against Osman Digna, involving some hard fighting, were continued with a view to opening the route across the desert to Berber until, towards the end of the month, orders were received from England that they were to cease, and that the force, after providing a garrison for Suakin, was to be disbanded. During these few weeks the *Hecla*, unable to find room in the small and crowded harbour of Suakin, had been anchored about 12 miles off at the nearest suitable anchorage that Wilson could find, and from there had been sending her working parties daily to assist the work at the port; but with the conclusion of the campaign, her services were no longer required, and on the 2nd of April, having received the commendations of the Admiral in a memorandum expressing his appreciation of the very able way in which Wilson had conducted the many trying duties entrusted to him, and his satisfaction with the behaviour of the

officers and men, she left for Suez and the Mediterranean, and after calling at Alexandria, arrived at Malta on the 21st.

At Alexandria, Wilson had received a letter intimating the wish of the Captain and officers of the *Vernon* to present him with a new sword in token of their appreciation of his gallantry at El Teb, but they had overlooked the fact that such a gift was irregular, and it was Wilson himself who first called their attention to it in the following grateful but firm refusal:

"ALEXANDRIA,
"15*th April*, 1884.

"DEAR MARKHAM,

"I hope you will give my very best thanks to the officers of the torpedo school who have so kindly offered to present me with a sword. My previous letter will have told you there was nothing in my share of the fight at El Teb to call for any special notice, but I should, nevertheless, have been proud to accept this gift as a sign of the interest felt by the torpedo school in all those who have belonged to it, were it not that the Queen's regulations so distinctly forbid officers to allow themselves to be complimented in this manner. I can assure you that I feel deeply grieved at the necessity for this refusal, as I know it will give pain to those who have only wished to testify their goodwill towards me, and to foster the *esprit de corps* that already exists among torpedo officers, but I think if you read the instructions on this point you will see yourself that I could not accept this present without a breach of the regulations, which I am sure the officers of the torpedo school would be the last to wish me to commit. I am sorry for the delay in answering your letter, but it only reached me on my arrival here, and I have taken a few days to consider my reply.

"Believe me, yours truly,
"A. K. WILSON."

It was an awkward situation for Captain Markham, but by a judicious presentation of his case, he succeeded in "squaring the Admiralty," and permission having

been obtained to make the offer, Wilson accepted the gift with great pleasure. It was accompanied by the following address:

"The Captain and torpedo officers of the *Vernon* beg you will be pleased to accept the accompanying sword as a token of their very great admiration for your conspicuous bravery at the battle of El Teb, and they hope you will also permit them to offer you their sincere congratulations on behalf of the torpedo officers of the Navy, which service is materially indebted to you for its present prominent position."

The same happy thought to present him with a new sword in the place of the one "so nobly lost" had occurred to a few ladies at Malta, the wives of his brother officers, but as these ladies were not serving under the Naval Discipline Act, the formality of a permission to do so was unnecessary, and the occasion of his arrival was now taken to ask his acceptance of it, and to present him with an address expressing their admiration of his valour.

Immediately on his arrival he had telegraphed to the *Inflexible* to join him to carry out some long-deferred experiments, and as soon as she arrived he escaped in her to St. Paul's Bay for a few days. He then sailed for England, and arrived at Spithead on the 10th of May, whence, as soon as he had completed his official business, he went home on leave.

It had just been announced in the *London Gazette* (20th May) that he had been awarded the Victoria Cross, and Swaffham was making great preparations to give him a fitting reception, but almost at the last moment he announced his intention of coming by an early train, which would have spoiled it all. He had purposely been kept in ignorance of what awaited him, for fear he should find an excuse not to come, and it was only by a stratagem that his sisters induced him to delay his arrival to a more suitable hour, without attributing the reason.

When he arrived in the train, the sun was shining

brightly, the station and streets were gaily decorated with flags and devices expressing welcome, the shops were closed, and an immense number of people were assembled in the station yard, where were also drawn up the local volunteers with a band, the pensioners wearing their medals, and the school children with their banners.

It was a complete surprise for him, and he was deeply moved by such an unexpected display of enthusiasm on his account. As he came out of the station carrying in his hand the two presentation swords, the vicar advanced, and said:

"Captain Wilson, I am deputed by the parishioners of Swaffham to convey to you our sincere congratulations on your safe return home after the perils of war. And not only this, but also to express our keen appreciation of the gallantry and pluck which you have shown under circumstances of extreme difficulty. That an officer in his Majesty's Navy should do his duty in action is no surprise to us; but you, sir, were placed in exceptional circumstances, and such as would have tried the stoutest and the bravest hearts. You, sir, are not the first naval hero whom Norfolk has honoured, nor the first who has gained laurels in Egypt. The great Lord Nelson has preceded you, and the famous anagram on his name, 'Honor est a Nilo,' may in a sense, taking the Nile for Egypt, be applied to you. But I daresay, with the modesty which always accompanies real greatness, you might translate that anagram with reference to yourself thus, 'There is honour from nothing at all.' However much you may disparage your own acts of bravery, it is a satisfaction to know that your country and your Queen are not unmindful of them; and this day's *Gazette* gives the pleasing announcement that Captain Wilson is to receive from her Majesty the distinguished honour of the Victoria Cross. Your county, too, is not unmindful of you, for Norfolk is ever ready to appreciate the great deeds of her sons. Your townspeople are not unmindful of you, for in this little demonstration hastily got up, but with great unanimity of expression and feeling, we wish to show you what we think of

our hero. Nor are you, sir, one of those whose only claim to merit is the strong arm and the lion heart. I know from good authority that Captain Wilson is one of the most distinguished men of science in the Navy, and that no man knows so much about torpedoes as he; in fact, he is the instructor of others. And being in the prime of life, and should length of days be granted him, there is little fear of his rising to the very top of his profession, and then, when fighting days are over, we can fancy him being towed into his rest at Swaffham, like Turner's picture of the old fighting *Temeraire*, in which is combined so much of pathos and of poetry. And the then inhabitants of Swaffham will be able to say, in the words of an old sea-song, as he is carried to his rest, 'There goes a true heart with Arthur Knyvet Wilson.'"

After a few more words from another resident, Wilson replied that he did not know how to express his thanks to the large number of people belonging to his native town whom he now saw before him to give him a welcome home. He was born in Swaffham, and he thought it was the love entertained towards his family that led them to give him such a reception. He said he had done nothing out of the common way; somebody must be in the front, and he happened to be there, and he congratulated himself in getting off so cheaply. He could not make a long speech, and could wish that Swaffham men, wherever they went, might do better than he had done.

Entering a carriage with some of his immediate friends, he then drove off to his mother's house in the town, where she, seated at a window looking out on the market-place, awaited him.

A more formal ceremony awaited him at Portsmouth. The Commander-in-Chief, Admiral Sir Geoffrey Hornby, had been directed to present the Cross in Her Majesty's name in a public and formal manner, and on the afternoon of the 6th of June, a brigade composed of the ship's company of the *Hecla*, representative companies from the Channel Fleet and

harbour ships, a battalion of the Royal Marines and the Royal Irish Fusiliers, was assembled on Southsea Common for the purpose, with some thousands of spectators to witness the ceremony.

The troops having been reviewed and formed in a square, Sir Geoffrey Hornby, who was accompanied by H.R.H. the Duke of Edinburgh, pinned the Cross on Captain Wilson's breast, and addressed him in a stirring speech, congratulating him on the prompt, bold, and efficient manner in which he had discharged his duty at a critical moment, and expressing his conviction that his example would serve to incite those under him in future so to do their duty that they might perchance attain to similar distinction. The people cheered, the troops rendered a General Salute, the bands played the National Anthem, and the ceremony was over.

Wilson went back to his ship, and it is said was found soon afterwards in his workshop continuing his experiments! He had not invited any of his relatives to be present at the ceremony, and it was only by accident that he discovered that his sister had been invited to attend it. The entry in his diary runs:

June 6.—Docked ship. Received the V.C.

The next evening, (7th), he met the Duke again at a dinner and reception at the Admiralty House, and received from him a message from the Queen to express her great regret that she had not been able to give him the Cross herself—that she had always made a point of giving this honour herself, but by some unaccountable neglect she had not been informed until after the ceremony was performed.

However, he had a good talk with the Duke about torpedo matters, and was much pleased to find he took such a keen personal interest in a programme of exercises, similar to those of the previous year, which were about to be carried out by the Channel Fleet at Berehaven.

Congratulations and invitations were pouring in, and on the 8th he wrote:

". . . I hope we shall get away to-morrow to Bantry, a very good place to hide oneself in till the storm of honours blows over. I have had two invitations to dinner in London, one from the Press Fund, whatever that be, and the other from the Savage Club, to welcome home the newspaper correspondents from the Soudan. Both I should think very good things to escape. Yesterday I got a telegram asking me to stay with the Queen at Balmoral for two nights on Wednesday next, to which, of course, I had to answer that duty prevented me."

The mining exercises commenced as soon as he arrived at Berehaven, and on the 26th he wrote:

"We have had a busy fortnight with plenty of mistakes to show the necessity for the exercise, but on the whole things have gone very pleasantly, with charming weather for all but the fishermen. . . . I find His Royal Highness a very good man to work with. . . . One day he took us out and manœuvred us in the torpedo-boats all the forenoon, and about twelve o'clock made a signal, "Admiral requests the pleasure of the officers' company to luncheon at Mrs. Eccles' Hotel, Glengarriff." He gave us a very good luncheon, time to walk about and enjoy the scenery, and then exercised us all the way back again."

A correspondent, who was aboard the *Hecla* at this time, describes Wilson as being engaged with some of the staff in carrying out many experiments, among which was an exhibition of the firing of some live torpedoes at some rocks. Many years afterwards the late Admiral Britten, who was then Flag-Captain to His Royal Highness, related the following story of an incident that happened on one of these occasions. The Admiral and a party of officers had come to see the exhibition, and in due course the torpedo was fired from a boat; it ran

straight and hit the rock, but there was no explosion. All that could be seen from a safe distance was the torpedo churning up the water with its propellers. As it was not a thing to be meddled with at the moment, the Admiral and party returned to their ships. While at luncheon an hour or so afterwards, the Admiral and Flag-Captain were discussing the incident, when a signal midshipman came in to report, "Captain of the *Hecla* coming alongside; he is towing a torpedo in his galley."

In a few moments Wilson was alongside with the defaulting torpedo, and it transpired that on the departure of the Admiral, he had gone back to his ship and obtained a diving dress, with which he returned to the rock, where he got overboard to see what was the matter, and finding that the head was broken off, he pulled the body clear and towed it back.

With characteristic modesty he omitted from his official report any reference to his personal share in this risky performance, contenting himself with merely stating that "the place was afterwards cautiously examined by a diver."

On the completion of the programme, Wilson drew up a long report of the results, concluding with an urgent recommendation for more practice.

"On the whole the submarine mining portion of the programme was better carried out than last year, but the work is still very far from perfect. I cannot think satisfactory results will ever be obtained until a day in every week is set apart for torpedo drill, and adhered to with the same regularity as the days for general quarters or sail drill."

Whereon His Royal Highness, after expressing his approval of the manner in which the exercises had been conducted, remarked:

". . . I feel, however, there would be great difficulty in giving one day in every week to this par-

ticular branch in a squadron in which exercises aloft play such an important part as it necessarily does in the Channel Squadron. . . ."

The scene was now shifted to Portland, where, after picking up a flotilla of eight first-class torpedo-boats at Spithead, the *Hecla* rejoined the Squadron. The object in view was the testing of the equipment and seaworthiness of the boats under service conditions, their readiness for service, the practising of them in manœuvring in company by day and night, and in the attack of ships. It was the first step in a new departure, for nothing of the sort had been attempted before, and it showed up the defects of the boats, the difficulties under which they laboured, and the want of an organization for their care and maintenance, with the intensity of a searchlight. Nevertheless, the operations appear to have been well carried out; attacks on the ships at anchor were made on several nights, both from near and distant rendezvous, and though the ships purposely did not make full use of their resources for defence, some experience was gained in the use and effectiveness of the searchlights. The frailty of the boats and the need of such a vessel as the *Hecla* to act as parent ship was demonstrated; faults in their equipment and fittings were noted in minute detail; their sea-going qualities were observed and compared, and measures were recommended for maintaining these boats more efficiently in reserve in future.

On the conclusion of these operations the *Hecla* returned to Portsmouth, and on the 31st of July, Wilson transferred the command of her to his successor.

He had served in her for three years and four months, and to the renown of having won the highest personal distinction awarded for valour he had added a wider reputation for ability and untiring industry in the exercise of his profession. The personality of the

man had become more widely known; his love of his work, his patience with the mistakes of others, the very geniality with which he insisted on work being properly done, his personal example of perseverance in overcoming difficulties, and the moderation with which he stated his views, combined to gain him an unusual measure of confidence from all who served with him. If he had not obtained the full acceptance of his ideas he had prepared the soil and sown the seed, and could trust the logic of facts to produce the results in due course.

CHAPTER V

CAPTAIN: "RALEIGH," ADMIRALTY, AND "VERNON" (1885-1892)

WILSON'S next service afloat was in command of his old ship, the *Raleigh*. On leaving the *Hecla* he had taken a short holiday on the Continent, and on return had been appointed to the chairmanship of the Torpedo Discharge Committee, a small body of experts that were engaged in investigating the problem of safely and successfully discharging these weapons from a submerged tube on the broadside. To use a current phrase, it was not a whole-time job, and he was frequently able to spend a week or ten days at home till, at the end of the year, he was put on another committee to inquire into the cause of an accident which had happened to one of the guns on board the *Active*. He was thus engaged when he received the offer of an appointment, which he announced as follows:

"DATCHET,
"*31st January*, 1885.

". . . A change has come over the spirit of my dream since I last wrote. When I got back from Portsmouth last night I found a letter from Sir Walter Hunt Grubbe waiting for me, asking me to go as his Flag-Captain to the Cape Station. This morning I went to the Admiralty to see if I was free to accept it, and finding there was no objection I have done so. My old ship the *Raleigh* is to be the flagship, and I am to commission her on the 24th of February at Plymouth. . . . I like the idea of having command of my old ship. I wish these committees were off my hands. I shall probably turn the Torpedo Committee over to Markham, the Captain of the *Vernon*, but I am afraid I must finish off the *Active*

CAPTAIN A. K. WILSON, R.N., V.C., H.M.S. "RALEIGH."

gun myself. I have not seen my new chief yet, so I can't make any plans. I shall have a good deal to settle before the 24th, and Plymouth is rather far for running backwards and forwards much, but I must try and get as much time at Swaffham as I can. . . ."

After the customary period spent in completing with stores, carrying out "commissioning trials," and shaking down a new ship's company, the Admiral embarked, and on the 29th of March the *Raleigh* sailed for her station. She reached Madeira on the 4th of April and sailed again on the 7th for Sierra Leone, and was at sea on the 10th, when the news was received in England of an attack by some Russian troops on the Afghans at Penjdeh on the 30th of the preceding month. Public opinion in England was very much excited by what appeared to be a wanton attack on our ally, and preparations for war were immediately commenced and pushed on with all haste. Foreign stations were warned that hostilities were imminent, and Russian ships were being watched and shadowed by our own in all parts of the world.

Whether any information of these conditions ever reached the *Raleigh* is uncertain. There is no mention in Wilson's diary of it, and his letters of the period have not been preserved; but probably it did, for she only stayed a day at Sierra Leone to coal, and thence proceeded to St. Paul de Loanda to coal again, but finding difficulty and delay in getting it, pushed on for the Cape with what she had, and arrived at Simon's Bay on the 13th of May with only four tons left in her bunkers.

In the meantime, the Commander-in-Chief[1] at the Cape had called out the Reserves and had taken up two large mail-steamers, the *Moor* and the *Mexican*, to be fitted out as auxiliary cruisers, and these were lying at Simon's Bay when Sir Walter arrived to take over the command of the station.

[1] Rear Admiral Nowell Salmon, V.C.

The alarm soon cooled down, but the crisis did not pass without revealing serious deficiencies in the organization for rapidly mobilizing the Fleet, and tended to confirm the criticisms of the *Pall Mall Gazette*, in the previous autumn, in a series of articles under the heading of "The Truth about the Navy," which urgently called for a reform.

The Cape, however, was not one of the acute danger points, and when the two auxiliary ships had left for China in June, the normal routine of the station in peace seems to have been soon resumed.

The station at this time extended roughly from Cape Blanco, on the north-west coast, to Delagoa Bay on the south-east, and included the islands of Ascension and St. Helena. Besides the flagship, the Squadron consisted of a corvette and six small vessels, which were mostly employed on the "Coast," as that part between Sierra Leone and the Congo was generally called. It had an evil reputation, the climate was hot and unhealthy, ships often lay for weeks at a time at open anchorages exposed to the full swell of the Atlantic, where landing was only possible in special surf-boats, supplies of fresh provisions were very scarce, and there was no sport or other means of recreation for officers or men. These disadvantages were counterbalanced to some extent by an occasional opportunity for active service, for the interior of the country was being opened up by traders and pioneers, and as the native chiefs were still paramount, the disputes common to such conditions frequently arose. Some one of these chiefs would hold up a steamer or loot a trading-station (perhaps not without provocation), and then retreat into a region of swamp and forest, from which he would have to be dislodged and punished by an expedition involving much hard work and risk, with the almost certain fate of malarial fever for everyone engaged. As a general rule, the flagship saw very little of this part of the station, for, with the exception of an annual tour round the coast, or when

some unusually important operation was in hand, she remained at the Cape.

Simon's Bay, the headquarters of the station, is situated at the north-west corner of a wide expanse of water between Cape Point and Cape Hanglip, called False Bay. On shore is a small dockyard, a hospital, an official residence for the Commander-in-Chief, and a small town mostly composed of the officers and employees of the dockyard and their families. At the back of the town, and around the shores of False Bay, there is a range of rocky hills with a few farms scattered about in the valleys and on the good lands, but the country generally is rough and wild.

Excepting an occasional day's target or torpedo practice at sea, the *Raleigh* remained at her moorings here till December, and Wilson was at leisure to join in the sports and amenities of the neighbourhood. He rode about the country, hunted with a pack of hounds that had been got together by one of the officers stationed at the port, played cricket and lawn-tennis, and paid an occasional visit to Wynberg and Cape Town, where, amongst others, he made the acquaintance of Dr. Gill, the astronomer in charge of the observatory, an acquaintance that ripened into a lifelong friendship.

In the previous year, he had been struck by the interference in aiming the guns caused by their smoke when the torpedo-boats made their night attacks on the ships at Portland, and had said at the time that he proposed to take the first opportunity to see what really happened, and how it could be avoided. The opportunity now occurred, and he described his plan and its results in the following letter, dated 9th of August:

". . . We are now preparing a little sham fight of our own; we have made a model of a torpedo-boat that we are going to fire at at night as we steam past it. It is a new contrivance of my own, because I have never heard of any target practice being carried out

at night before, and we don't know in the least what chance there is of hitting. In the newspaper reports of Admiral Hornby's Bantry Bay experiments they seem to assume that directly a boat is fired at she must be disabled, but I am very doubtful if shooting at night is as easy as they think, so I am going to try it. . . ."

On the 13th he added the result as follows:

". . . We have had our night target practice, and the result was rather curious. We moored our model about six miles off, and when it was quite dark we went to look for it, searching all round ahead of us with the electric light, all the guns—machine-guns and rifles—ready for firing. We first had a false alarm, and the men began blazing away at what I now believe was our own shadow on the opposite side to the electric light. The firing was soon stopped, and then we sighted the real target on the other side. Guns, rifles, and machine-guns all opened fire at once, an awful din, as you can imagine, and the result was that in a few seconds there was so much smoke the target could not be seen at all, but they still went on blazing away where they thought the target was until I sounded the 'cease firing.' When we came to examine the target there was not one hit.

"The next night, after I had preached them a sermon on wasting their ammunition by firing into the smoke, we went out again, this time with only two machine-guns and seven rifles, the rest of the men being in the rigging looking on. The result was very good indeed; there was very little smoke, the men were quite cool, and the target was regularly riddled. . . ."

He reported the result officially, giving the actual number of hits as twenty-seven in four and a half minutes. This night firing was one of the problems of the time, and with his usual insight into the heart of any difficulty, Wilson showed by this experiment, how gunfire with the black powder of the time defeated its own end.

In December, a visit was paid to Port Elizabeth to assist in the ceremony of opening an exhibition by

the Governor, and in January, 1886, the Admiral started on his annual cruise round the Islands and the Bights. A few days were spent at St. Helena, Ascension, and Sierra Leone, but the places on the open coast were only called at for a few hours.

". . . On the passage [from Fernando Po to St. Thomas] we had a man overboard one evening while we were at dinner. It was intensely dark, and my too gallant Commander[1] and one of the lieutenants, Denman, must needs jump overboard to try and help him, but much too late to do any good, as the man was at least 100 yards astern before they jumped. The Commander was in bed with the gout and his foot bandaged up. He had fed on nothing but slops for about four days, and the bandage got loose and wrapped round his legs. We lit the electric light, and picked them all three up not much the worse for the ducking."

Some good quail shooting was had at St. Thomas, after which the cruise was continued to Kabinda, the Congo, St. Paul de Loanda, and back to Simon's Bay, which was reached at the end of March.

Wilson, when away on leave, wrote on April 11th:

". . . I am now out on a little holiday with Dr.[2] and Mrs. Gill and a brother of his who is on his way to Australia. The two former are, as you know, my best friends here, and I thoroughly enjoy their company. The village is a quiet little place, with a hot-water spring close to it which is supposed to be good for all sorts of complaints, but I expect the fresh mountain air does more than the waters. We had to travel about forty miles by rail and then fifty miles by cart to get here. . . . We had quite a levee of Dutch farmers yesterday, who came to offer us hospitality. They are curiously gruff in their manners, but very kindly people. At first they answer in monosyllables, or only with a grunt; then they stand silent for some minutes, and at last blurt out all sorts of offers of

[1] The Hon. Assheton Curzon Howe.

[2] Afterwards Sir David Gill, His Majesty's astronomer at the Cape.

hospitality, till it seems that they cannot do too much for one. One old fellow told us he had been brought up as a boy to hate the very sight of an Englishman, but now he says he would never like to be under any other flag."

A cruise to the eastward was made in June to visit Port Alfred, East London, and Durban, but otherwise the time was passed at Simon's Bay, in much the same way as in the previous winter, until November, when the *Raleigh* was detached to convey the High Commissioner, Sir Hercules Robinson, to Mauritius, to inquire into the administration of the government of the island. During these proceedings on shore, Wilson took the ship for a cruise to the neighbouring French island of Bourbon, and on return, received a letter offering him the newly-created post of Director of Torpedoes at the Admiralty.

The High Commissioner completed his inquiry on the 14th of December, and on the next day carried out what Wilson called his *coup d'état*, by relieving the Governor of his duties. A colonial officer was appointed to administer the government in his place, the Mission re-embarked, and on the 18th the *Raleigh* sailed for the Cape.

The Commander-in-Chief was detained throughout January at Simon's Bay, waiting for the arrival of the *Royalist*, the corvette on the coast. There was no telegraph cable on the West Coast in those days, and, unknown to him, she had sent an expedition up the Brass River, out of which sixty-three men out of the sixty-four sent up had gone down with fever, including the Captain. This necessitated her putting in to Ascension Island to land them and send them up the mountain to recover. As soon as the news of what had happened was received, the Admiral sailed on his annual cruise, with Wilson still in command. On arrival at St. Helena, where his successor was waiting for him, he handed it over, and landed to wait the arrival of the homeward bound mail steamer. It was

a sad business to him to leave his happy ship, and he could hardly restrain his feelings as a boat's crew of officers rowed him ashore.

He reached Southampton on the 2nd of March, 1887, and on reporting himself at the Admiralty, was disappointed to find that his new post was not quite what he had been led to expect, nor could he get any instructions as to his new duties. On the 13th he wrote:

". . . I understand I am to be called Assistant Director of Torpedoes, Captain Fisher being called Director of Naval Ordnance and Torpedoes, instead of only Director of Naval Ordnance. I made a slight protest, but was told it was all settled and could not be altered. It is rather as if they had offered me a situation as cook and then made me scullery-maid. They are going to be very liberal in the matter of pay, however, as they propose to give me £950 a year, and I was rather glad to see that in explaining the matter to get the money out of the Treasury the Admiralty were obliged to say that, although I was called Assistant Director, I should have the greater part of the work of the Director. . . ."

The origin of the appointment was the decision come to in the previous year to transfer the charge of naval armaments and ordnance stores from the War Office to the Admiralty, and when Fisher took up the post of Director of Naval Ordnance, he pressed for the appointment of a Captain as Assistant Director under him, naming Wilson as the man he desired to have. Technically, Wilson did not begin his duties till the 20th of April, but he at once set to work to acquaint himself with the recent progress of torpedo work, and to pick up the threads of his duties without waiting for instructions. The scope of these duties ranged over many subjects besides the Whitehead torpedo, for, as has been remarked before, the department covers much more than its name implies. At the moment there were two very important electrical

developments in progress—lighting and gun-firing; there was also the improvement of the net defence against torpedoes; but what claimed his special attention was the torpedo itself.

On assuming office, he found that that perennial body, the Torpedo Discharge Committee, was conducting some trials to determine the relative merits of two methods of discharge from a submerged tube in a new cruiser, the *Mersey*, at high speed under way.

Stated in plain terms for the benefit of the uninitiated, the problem was to devise a means of firing a torpedo from a tube under water with the ship moving at high speed, without injury to the torpedo itself. The difficulty was that the tail of the torpedo was always damaged by striking the ship's side before it could get clear.

Wilson attended these trials and watched them very closely. It was soon apparent that one of the tubes was quite unsuitable, but while the other was far from reliable, it was thought possible to improve it, and on his suggestion certain alterations were made in the fittings, which gave better results. The ship, however, was by no means at the disposal of the Committee to carry out what had developed from a comparative test to a series of somewhat costly experiments—she was wanted for other services; the Controller was frankly sceptical of the possibility of a successful issue; the Commander-in-Chief at Portsmouth stated that he considered torpedoes were out of place in battleships, as they would be a danger to friend and foe in a mêlée; so there was much delay, and the Committee could but seldom obtain an opportunity to carry out a trial, until Wilson submitted his views in a long minute, in which, having stated that the main difficulty had been got over, he said: "I consider the question of submerged discharge by far the most important torpedo question of the day. It is the answer from the torpedo side to the quick-firing gun, and as far as I see almost the only answer possible."

This seems to have clinched the argument, for the First Sea Lord approved of the *Mersey* being used for a continuance of the experiments.

Though not a member of the Committee, Wilson took an active part in the conduct of these experiments, and their successful issue was due to his ingenuity in surmounting the difficulties. Not the least of these was to discover what actually happened when a torpedo was fired, what were the causes of erratic running, and what were the strains set up; but it would be out of place here to attempt any description of what they were, and it will suffice to explain that, as a torpedo is fitted with both vertical and horizontal rudders, its course through the water will be very erratic if it rolls from side to side. To obviate this, Wilson devised a method of suspending the torpedo on the bar by what are known as "hook brackets," in substitution of the "T" piece that was being used; and then, as the tail of the torpedo was still found occasionally to hit the bar, two studs were fitted on the outside of the engine-room to steady it further and prevent its doing so. The success of these measures was such that they have been continued ever since, and are fitted to all torpedoes of large dimensions up to the present day.

In summing up the results in the Annual Report, Wilson described them as the most important advance which had been made during the year. The experiments "had resulted in definitely settling the question for the present and in determining the type to be fitted in future ships."

He was created a Companion of the Bath in the summer of 1887, and with the exception of a short spell afloat in command of the *Impérieuse*, to take part in the Naval Review to celebrate the Queen's Jubilee, and in subsequent manœuvres, he held this post for twenty months—that is, until the 1st of January, 1889, when he became Captain of the *Vernon*, being succeeded at the Admiralty by Captain E. F. Jeffreys

who had formerly succeeded him in the command of the *Hecla.*

Three months after he had taken up his new duties, there was passed by Parliament a Naval Defence Act, authorizing the building of seventy new vessels for the Navy on a definite programme which was to be completed in five years, and in which were to be embodied all the latest improvements.

In July, the gunnery and torpedo schools having been closed on the mobilizing of the reserve ships for the manœuvres, Wilson went to sea as Flag-Captain to Rear-Admiral Tracey in the *Rodney*, and on his return in September, was surprised to learn that the Admiralty were about to order 150 torpedoes of a new and larger pattern from Mr. Whitehead, without consulting him as Chairman of the Torpedo Design Committee. The introduction of a new weapon was a very important departure, and in this case it appeared to him to be attended with so many disadvantages and such risk of failure, that he immediately wrote a strong protest against the decision being taken without further consideration, or at most to limit the order to a few for the purpose of trial and experiment.

The facts of the case, of which he was not in possession, were as follows:

Captain Gallwey, who was commanding the *Hecla* in the Mediterranean, and an expert in torpedo work second only to Mr. Whitehead himself, had just reported very favourably on the superior performances of an 18-inch pattern which he had witnessed at Fiume, and on receipt of his report, it at once became a question whether this pattern should not be adopted for our new ships. A prompt decision was necessary, as other customers were in the market, and Mr. Whitehead, while giving the British Government the first refusal, could only undertake an early delivery on condition of an order for a large number, failing which delivery was very indefinite. Captain Jeffreys took up the question, and pushed forward, with customary

energy, a proposal to adopt these weapons for the new ships, in which he was backed by the Director of Naval Ordnance and the Controller. Wilson pointed out that this would duplicate patterns of weapons, mountings, tools and fittings, and of reserves; that the larger pattern was too heavy for use from boats; that we had no experience whatever as to its behaviour when discharged from a submerged tube; and that the advantages claimed for it were of very small account compared with the 14-inch. Nevertheless, the paramount fact remained that, unless the order was given at once, the new ships would either have to wait for their torpedoes, or be armed with a weapon inferior to those carried by foreigners. These were all duly considered; it was decided to arm the new battleships, first-class cruisers, and a new type of vessel styled a torpedo gunboat, with this large pattern torpedo, and in September, 1889, Captain Gallwey was directed to conclude the contract with Mr. Whitehead.

This decision involved a large increase of work, and monopolized during the following year a large share of the attention of the torpedo school, for it included not only the trials of the torpedoes themselves, but also the preparation of designs for the tubes, the arrangements for stowage, and all the accessories required for their use. A long series of trials were carried out from a submerged tube fitted in the *Vulcan*, a new torpedo depôt ship, which exhibited many factors in correct running and discharge, each requiring a close examination and the provision of instruments to detect what occurred. In the end, however, the new weapon justified its adoption. To be exact, it showed an appreciable improvement in accuracy, an increase of range from 600 to 800 yards, an increase of speed, and it carried a charge of 200 pounds of guncotton instead of 60 pounds.

The menace of the torpedo as a factor in naval warfare was steadily growing. On the first night of

"hostilities" between the two fleets assembled for the manœuvres, Sir George Tryon was successfully attacked by some torpedo-boats from Alderney under Lieutenants Wells[1] and Sturdee.[2] It was an incident that attracted a good deal of attention, and confirmed the need of providing protection and security to a fleet at anchor from attacks by what was called the mosquito fleet.

The proposed means of effecting this protection was to enclose certain harbours, of which Portland was one, with a continuous boom, moored outside the anchorages. A plan of such a boom was designed, but before full action was taken it was decided to test its efficacy. A section was therefore made, consisting of a strong wire hawser and large baulks of timber, 12 inches square, armed with powerful steel spikes. This was moored in Portsmouth Harbour, and Wilson was ordered to test it. He sent a first-class torpedo-boat, under Lieutenant Sturdee, at it full speed, while he stood by to photograph the result. The boom entirely failed in its object, the boat cutting easily through it without being injured by the spikes, one of which was fairly broken off.

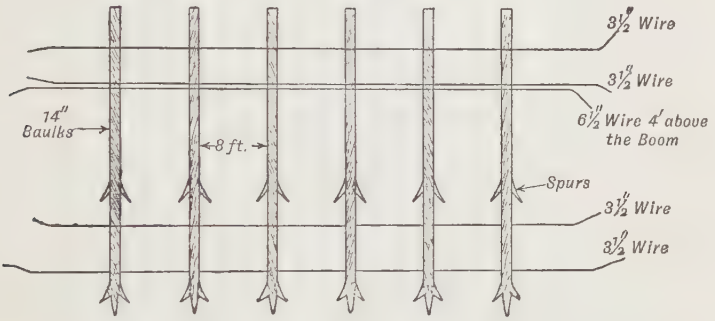
The next trial was a much more serious business. A committee in the Mediterranean had devised a new plan of what is called a "ladder boom," consisting of baulks of timber placed transversely across four wire hawsers, and shod with a steel point and a double row of strong steel spikes or spurs, while 4 feet above the baulks was stretched another 6-inch wire hawser to sweep the deck of any craft that tried to rush it. These details will be better understood from a reference to the following sketch:

Everyone knew that to smash a boom it was only necessary to drive a vessel heavy enough at it, but in this case, the test required was whether such a light and comparatively frail craft as a torpedo-boat could

[1] Now Captain Sir Lionel Wells, Kt., C.B.
[2] Now Admiral of the Fleet Sir Doveton Sturdee, G.C.B.

THE ATTEMPT TO JUMP THE BOOM.

get through or over it. It was a dangerous experiment, but Wilson thought it might be done, and told off Sturdee again to try. A torpedo-boat (No. 76, Yarrow) was fitted with a stout wooden "horse" from stem to stern, a sort of fore-and-aft bridge with sloping ends, duplicated abreast the funnel, which latter was fitted with a hinge so that it could fall backwards, and over which the 6-inch hawser would slide. The boom having been securely moored, Sturdee charged it at full speed in the boat thus fitted. The bow of the boat rode right up on the boom unchecked by the 6-inch hawser, but she was brought up by the steel spurs, and began to heel over and settle down, and on



going astern, she came off and sank before she could be beached.

So far the boom was a success, but as usual in nautical matters, Father Neptune had the last word, and his verdict on the subject was final. The motion of the sea would fret and chafe the moorings and connections of the sections with each other to such an extent, that a gale of wind would break adrift the whole concern.

In the following year (1891) Wilson invented an ingenious mechanical appliance which he called the "Pioneer," an instrument that, fixed in the head of a torpedo, would shear its way through the wire nets suspended as a protection round the ship. The idea

of some such instrument was in the air, and after discussing it with some officers one evening after dinner, the flash of inspiration occurred; he sat down there and then, and drew a sketch of what he proposed. It was tried, and, proving to be very successful, was adopted for use in the service under the name of "Pioneer," to hide its existence and purpose from the knowledge of inquisitive foreigners.

These instances will suffice to indicate the active part he was personally taking in the development of his special weapon, the torpedo, though they afford but a faint idea of the amount and variety of the work for which the *Vernon* is responsible.

The ship herself presented a very noticeable contrast to anyone joining her for a "course" from a sea-going ship or from the Gunnery School. It was not only the difference in the appearance of her decks, which, apart from the living quarters and class-rooms, were littered with mines, coils of wire, electric cables, and other materials, instead of the usual row of shining guns, with their paraphernalia all neatly and uniformly stowed, but it was the absence of military precision, or of the straining after a spectacular effect, which was so striking; in naval parlance, there was no "evolution" about the drills, the subject did not admit of it.

The instruction and training were largely a matter of routine, and the carrying out of experiments and trials, the improvement of the machinery and fittings in the various departments, was mostly the work of other men, but Wilson was always in close touch with what was being done, and able to decide at once any disputed or doubtful point that arose. Being a bachelor, he lived on board the ship, his cabin being situated just above the wardroom, where the noise of the frolics and fun habitual in a mess after dinner would have distracted most men, but he never seemed to notice it. Hospitable to his friends and enjoying their hospitality to him, he took very little recreation, except for an annual holiday in the autumn, when he

would go off to Scotland, or on a series of visits to his friends to shoot.

Always accessible and unruffled, no matter what he was engaged in, he was clear and prompt in his decisions, but he could rarely be got to explain his reasons for his actions or opinions, and even when he did so, the explanation was given in such a condensed and concentrated form that his interlocutor was often left but little the wiser. In this respect his fellow committee-men and subordinates found him a difficult man to work with; for in such technical subjects as had to be dealt with, it was highly desirable for them to be enlightened as to the course of his thoughts. Nevertheless, one of those who was closely associated with him at the time has written that afterwards he invariably found Wilson's decision was correct.

After a busy three years he was appointed once more to a seagoing ship, and on the 9th of February, 1892, he was succeeded by Captain W. H. Hall.

CHAPTER VI

CAPTAIN: "SANS PAREIL"
(1892-1895)

The *Sans Pareil* was commissioned at Chatham on the 9th of February, 1892, for service in the Mediterranean. She was a new battleship of 10,470 tons displacement, armed with two 110-ton guns in a turret forward, one 29-ton gun aft, and six 6-inch guns on each broadside, one of the two battleships laid down under the Northbrook programme of 1885, and launched in 1888. Her sister ship, the *Victoria*, had already been in commission for two years as the flagship of the Mediterranean Fleet, and was now flying the flag of Vice-Admiral Sir George Tryon.

Wilson took as his Commander an officer well recognized as one of the rising men of the day, John Rushworth Jellicoe, now Admiral of the Fleet Viscount Jellicoe of Scapa.

Leaving England on the 6th of March, the ship made a satisfactory run of 322 miles in a twenty-four hours' trial, and having touched at Gibraltar on the way, reached Malta on the 16th. He had with him as his guest for the passage out Dr. White, the Director of Naval Construction, who, we may be sure, was watching every detail, seeking the opinions of the officers on matters concerning their departments, making notes of the ship's behaviour, and absorbing experiences to be turned to account in future designs. A few minor defects were developed, and were noted in Wilson's diary. On the whole, both he and White had good reason to be pleased with the ship.

The defects were quickly made good at Malta, and

after a few weeks spent in working up the ship's company in their drills in slow time, the *Sans Pareil* took her place in the fleet, and towards the end of May, proceeded with it on a cruise to the coasts of Greece and Asia Minor under the Commander-in-Chief.

The diaries that Wilson kept throughout the commission are only a very intermittent chronicle of events, some of which are described in more detail in his private letters, but neither his private nor his official correspondence contains any record of his opinions or views on passing events. Sir George Tryon, his chief, was one of the most prominent men in his profession; he was constantly practising his fleet in tactical movements and in following his motions without signal, and as he loved an argument, and Wilson was as much in his confidence as anyone, there were probably many discussions about what form the naval battle of the future would take, and about other kindred subjects; but if so, no record of them has come to hand, and the influence that each exerted on the other remains a matter of conjecture.

On arrival at Vourlah, near Smyrna, the Commander-in-Chief received an invitation to visit the Sultan at Constantinople. It was naturally an occasion for some ceremony, and Wilson had the satisfaction of being asked by the Admiral to accompany him. The party, which included Captain Noel[1] of the *Nile*, and the principal members of the Staff, embarked on board the despatch-vessel *Surprise*, and on the 17th of June reached Constantinople. A description of the visit is given in the next letter:

"H.M.S. 'Sans Pareil,' Vourlah,
"*27th June*, 1892.

". . . Our visit to Constantinople was very interesting and pleasant to the end. There was a great deal to see, and we saw it all under the best conditions. There were perhaps rather too many grand dinners,

[1] Afterwards Admiral of the Fleet Sir Gerard Noel, G.C.B.

but they were inevitable. The dinner with the Grand Vizier was much more sociable and pleasant than the Sultan's. I sat next to Said Pasha, the Minister of Foreign Affairs, and he was a talkative old gentleman who spoke French well, and he chatted away very pleasantly the whole time. Then we had a great luncheon at the Ministry of Maritime, and a walk round the dockyard and workshops afterwards, and the Admiral gave a dinner in turn. We also had two trips up the Bosphorus, one in an ordinary passenger steamer, and the other in the Sultan's steam launch. In the latter case he gave us authority to go and examine any of the forts we liked, but we only had time to look at one. The Bosphorus was looking beautifully green and pretty. We got back here on Saturday, and to-day there has been a regatta for the midshipmen of the Fleet, in which about fifty boats started. We did not distinguish ourselves."

After continuing the cruise for another three weeks in these waters, the fleet returned to Malta for ten days, and then proceeded to the ports in Sicily and on the coast of Italy. On the 4th of August Wilson wrote from Castellamare:

". . . We spent a night at Catania, where we got a splendid view of the eruption of Mount Etna. By day we saw nothing but smoke, but at night there was a grand sight of red-hot lava being thrown up in the air and streaming down the mountain-side. Our young doctor and some of the flagship's officers were energetic enough to spend the night in climbing the mountain to get as near as they could to it. . . . I should have liked to go if we had been there in the daytime, but I was too lazy to spend a night over it, and we sailed the next morning. From Catania we went through the Straits of Messina to Palermo, a fine town, with plenty of fine buildings worth seeing, but the heat and glare were too much to make sightseeing any pleasure. One night we had a nasty hot wind off the shore, which raised the temperature on deck in the middle of the night to 94 degrees. . . ."

On the 15th of August, the *Sans Pareil*, *Australia*, and *Phaeton* parted company from the flag, and proceeded

under Wilson's orders to visit Leghorn, Spezzia, and Genoa, at which latter place great preparations were being made for a festival in honour of the memory of Christopher Columbus. It was to be an International event, and all the Western Powers of the world had been invited to send their representatives; the King and Queen of Italy were to be present, and Wilson and his ships were to represent Great Britain.

There was a great deal of festivity at Leghorn, as the place was crowded with people, and was at the height of its season as the principal Italian watering-place. The visit to Spezzia afforded an opportunity to see over the naval establishments on shore, and to become acquainted with the officers of the Italian fleet, but needs no further notice.

On arrival at Genoa on the 3rd of September, the Austrian and United States Squadrons were found already there. Others continued to arrive during the next few days—French, German, Spanish, Portuguese, Greek, Dutch, Argentine, Mexican, and Roumanian—which, with their hosts, made thirteen nations and fifty ships, besides a large number of merchant ships in the inner harbour.

The celebrations began on the arrival of the King and Queen, escorted by the Italian Fleet, on the 8th, and were continued for the next six days in an uninterrupted succession of receptions, balls, dinner-parties and official visits, with a gala performance at the opera, and a grand illumination of the ships and the town.

Wilson drew a pleasant picture of the gracious and untiring manner in which their Majesties greeted their foreign guests, and attended without sign of fatigue the long succession of ceremonies. At the dinner to the foreign Admirals and Captains:

"We were all put in a row on one side of a room. . . . Admirals on the right and Captains on the left. Then the King and Queen came in, and the King went to the right to talk to the French Admiral, and the

Queen came to me as the senior Captain. . . . She spoke very good English, and then went on to talk to the German in his own language. The next one was the Mexican, and she asked what language he would like to speak, as she was sorry she could not speak Spanish. This created a little amusement, because the Mexican Captain was an English naval officer who had only left our service three months and could not speak Spanish any more than she could. . . . There were between eighty and ninety people at dinner, and after it the King and Queen went round and, I believe, conscientiously talked to everyone. . . .

"On Monday we were told that the King would visit some of the ships. He started at half-past ten and went thoroughly round the senior officer's ship of every nation, and seemed as keen about seeing everything at the end as he was at the beginning. He finished the last foreign ship about twenty minutes past six, and, as it was known that he had to dine at seven, everybody thought he would go straight ashore; but no, he went right out again to inspect his own flagship, which was furthest from the shore, and got on board after the Admiral and Captain had landed to dine with him. He left her about a quarter to seven, and we all chased him ashore and drove to the palace, where we found him ready when we got there. . . . As the King had been round thirteen ships without food or rest, and the Queen had inspected nine different establishments on shore, someone suggested that their Majesties must be tired; but the Queen said at once in her bright way, 'Oh, he is not a bit tired, look at him; no more am I either,' and she danced off down the room to go and change her dress to go afloat. . . ."

The most gorgeous spectacle of the fêtes was the scene presented by the illuminations. The buildings and houses of the city were all lit up in various colours, and as the city stands on the side of a hill facing the sea, it was favourably situated for such a display. Afloat, every man-of-war and merchant ship was illuminated, and every open space of water was crowded with small boats carrying Chinese lanterns and lights. The scene was so bright that the men-of-war ceased to burn their searchlights, as they only

spoiled the effect, and Wilson wrote he had seen nothing to equal it since the illuminations at Bombay.

The official programme of the celebrations came to an end on the evening of the 14th, when their Majesties departed by rail, the Queen being presented at the station with a bouquet more than 6 feet in diameter! The next day Wilson hauled his ships off the Mole, and after a final dance on board the Italian flagship, left for Malta.

He had fired 6,968 rounds in salutes!

On rejoining the Commander-in-Chief at Malta, another cruise was undertaken to the Levant, in the course of which the pulling and sailing regattas were held.

The annual regatta is always a great event in a fleet, and excites the keenest interest. Every class of rating and every class of boat have their race; practice is carried out for weeks in advance, and when the appointed day arrives, all drill ceases and ships' companies are at leisure to watch the events. Wilson noted his ship's success on this occasion as only one first and one second in the pulling races, and one first in the sailing.

On the 17th of November, when off the coast of Crete, Wilson was again detached in charge of a squadron consisting of the *Sans Pareil*, *Camperdown*, and *Dreadnought* battleships, with the cruisers *Undaunted*, *Amphion*, and *Fearless*. He spent a week in Suda Bay, and then went on to the Piræus with the *Undaunted* and *Fearless*, at the same time sending the other two battleships and the *Amphion* to Volo. During his visit to the Piræus he went up to Athens to stay with the British Minister[1] on several occasions, and afterwards wrote:

". . . He came down and spent one night on board with me. He had the Crown Prince and Princess to dinner one night and Prince George. It was a very informal affair. We descended to romping Christmas

[1] Mr. Egerton.

games after dinner, and finished up with a dance. The German Minister, who was evidently very dyspeptic, looked very glum at the sister of his Emperor making a fool of herself as he thought, and went off into a corner muttering something about 'bien des folies.' . . ."

On rejoining his detached ships at Volo, he had his first opportunity to put in practice some of his ideas on the practical training for war.

A plan was drawn up for an exercise in the attack and defence of ships at anchor at night. Two of the cruisers and the ships' torpedo-boats were detached under Lord Charles Beresford to act as the attacking force, and the remainder were moved to Port Surbi, where they were moored with their sterns hauled into the shore, and as ships in those days were painted white, their outlines and conspicuousness were obliterated as much as possible with bushes and branches of green stuff obtained from the shore. Searchlights and field-guns were landed, and on the night of the attack the ships were kept in complete darkness and silence, with guns manned and nets rigged out behind the screen afforded by the beams of the searchlights, bells and buglers being sent to distant points on shore to mislead the enemy.

The attacking force was considerably puzzled by these devices, but Beresford pushed home his attack in a most dashing style, and very nearly rammed the *Dreadnought*, which led the Commander-in-Chief to express his opinion, in a criticism of the operations, that "risks that were justifiable in war were not always so in peace"—a phrase that Beresford was fond of quoting in after years.

There was yet another sequel to the story, which was the subject of some chaff against Wilson. Never suspecting that the wild country around grew anything of value, the working parties were landed without restrictions as to what they were to cut for green stuff, and it was some time before it was discovered

that a number of olive-trees had been damaged and orders could be sent to leave them alone. It caused an unpleasant dispute, but a reasonable amount of compensation was eventually agreed to and paid.

One evening, while at Thaso, a steamboat was sent across to Kalamuti to land a merchant who had been over on business with the ship; it came on dark, the merchant was sea-sick, and the midshipman lost his bearings and did not return to the ship. It came on to blow very hard during the night, and Wilson got very anxious. It was hardly the business of the Captain to go away searching for a lost boat, but the next morning Wilson started in another steamboat to look for her, in spite of the gale and a blinding snowstorm, in which he could hardly keep his eyes open.

He searched the coast all day and eventually found her at Kavalla, some miles away to the west, and unable to move for want of coal. Having given her what he could spare and bought some more from a blacksmith, they just managed to get back to the ship that night.

The Rear-Admiral having now arrived at Volo, Wilson turned over to him the Squadron, and the *Sans Pareil* proceeded to Malta to go into dock and refit. While here, the Commander-in-Chief told him one day that he wanted his Commander (Jellicoe) for his own flagship; he was very much upset about it, and wrote:

". . . I have had a great blow in the prospect of losing my very able Commander, as he is to go to the flagship when she recommissions in April. The penalty we pay for selecting the best man is that some Admiral is sure to walk off with him when he gets the chance. It is, however, in a sense, promotion for Jellicoe, as it puts him in a more prominent position. I don't know who the new man will be. I tried for Wells, the man who managed the show at the Naval Exhibition, but he cannot come. . . ."

It is worthy of note here that when Wilson afterwards commanded the Channel Fleet, he would never

allow an application to be made for an officer in one of the other ships to fill a vacancy in his own. He considered it as bad as poaching.

On this occasion, Wells having declined, Wilson applied for Sturdee, also a torpedo officer, on the assumption that he was about to be promoted; but the Second Sea Lord would not consent to this, so Wilson, still faithful to the Torpedo School, chose Bush,[1] and he was appointed.

The *Sans Pareil* remained at Malta throughout the spring, and Wilson's next letter contains a note which will doubtless recall pleasant memories to some of those who were there then.

". . . Most of the Captains and a few others have been taking to riding parties on Saturdays lately, and very pleasant gatherings they have been. We send our luncheon out beforehand somewhere, and then ride out to meet it. Sometimes we lose our way, and it resolves itself into a hunt after the luncheon. The Saturday before last it was three o'clock before we found it. To-morrow Lady Smyth has asked us to lunch at her palace, so we shall have a larger party than usual, and more ladies. . . ."

Sir George made use of his professional talents by putting him in charge of the mobilization and exercise of the torpedo-boats in reserve, but he was getting "tired of Malta; it is not good for the ship," and was glad when at the end of May (1893) the Admiral took the fleet to sea.

After touching at one or two places on the coast of Greece, the fleet went on to Marmarice, a fine harbour opposite the Island of Rhodes, and thence to Haifa, under Mount Carmel, where a visit was paid to the cave where Obadiah hid the prophets. From Beyrout, the next port of call, Wilson and Bourke, the Flag-Captain, made an expedition to Baalbek, the site of the ancient ruins. A few days later, when the fleet was proceeding from Beyrout to Tripoli, the *Victoria*

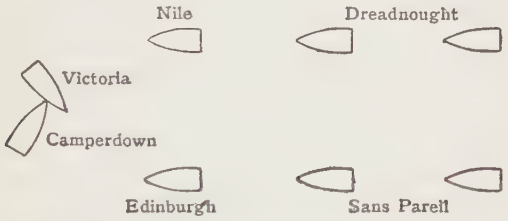
[1] Afterwards Admiral Sir Paul Bush, K.C.B.

was rammed by the *Camperdown*, and the Admiral and a large portion of the ship's company lost their lives.

Writing home that night Wilson described the disaster as follows:

"H.M.S. 'Sans Pareil,' Tripoli,
"*22nd June*, 1893.

"You will have seen long before this reaches you the terrible accident we have had this afternoon in the loss of the *Victoria*, and you will have probably seen by this time full particulars in the papers of how it occurred, but in case you have not it was simply this: The Squadron were in two lines 1,200 yards apart like this—



and the Admiral knowing perfectly well that the ships required 700 yards to turn in, made a signal to the two lines to turn in succession towards each other, with the natural consequence that they met in the middle. It was apparently an act of madness, but I think it was simply that the Admiral, who was by far the ablest man in the service, mixed up the radius and the diameter of the circle required in his head for the moment, and thought that allowing 350 or 400 yards for each, they would be after the turn about 400 yards apart, which is the distance he wanted them to be for anchoring. When he made the signal, Admiral Markham [who] was leading the other line, would not answer it for some time, and was beginning a signal to ask if it was not a mistake, when Admiral Tryon asked, 'What are you waiting for?' So Admiral Markham answered and went on with the manœuvre so ordered, supposing the Admiral, Tryon, meant to turn himself outside him. The final catastrophe was much more sudden than I expected. We all got boats ready for lowering directly, but the Admiral signalled not to lower them, evidently think-

ing he could get the ship to the shore; but in less than ten minutes she suddenly turned over and sank. . . .

"It is an extraordinary ending to such a brilliant career as Admiral Tryon's—that he should lose his ship and his life by what seemed to be an extraordinarily stupid bungle, but the fact is a smaller man would never have succeeded in getting such an order carried out. It was only the overpowering personality of the man and the confidence he inspired that induced Admiral Markham to carry out an order that was on the face of it insecure. . . ."

The formation of the fleet was of course thrown into confusion, the two leading ships had collided, and their seconds astern had commenced to turn and were each in an awkward predicament, but the third ships had not yet put their helms over, and Wilson was able to sheer over to port, and as soon as he was well clear, stop his engines.

The foregoing extract from his letter displays his warm appreciation of the high character and abilities, in some respects so like his own, of his old Captain and friend, the Commander-in-Chief, but his active mind refused to dwell on the great loss both the Service and he had suffered and deplored. He had already formed his theory as to the primary cause, and he was probably thus early thinking out the reasons for the ship having capsized. For the passing moment he made himself useful in helping to get the *Camperdown* seaworthy, and in looking after Jellicoe, who was lodged in his cabin weak and ill with fever.

The fleet remained at Tripoli, where it had anchored on the evening of the catastrophe, amid the depressing surroundings of salvage and wreckage, until the 5th of July, when, to the relief of everyone, they sailed for Suda Bay.

The new Commander-in-Chief, Sir Michael Seymour, having now reached Malta, ordered the *Sans Pareil* to join him there, as he intended to hoist his flag in her until the new flagship, the *Ramillies*, came out.

On Wilson's reporting himself on arrival, he was offered, and accepted, the post of Flag-Captain for so long as the Admiral remained in the *Sans Pareil.*

That afternoon the new Commander-in-Chief and his new Flag-Captain, aged about fifty-six and fifty-one respectively, played a single-handed game of rackets together. Not a bad testimony to their vigour and activity!

The fleet having returned to Malta, a Court-martial was assembled under the Commander-in-Chief as President, to inquire into the causes of the loss of the *Victoria*, and to try the Captain and survivors for their conduct on the occasion, in accordance with the long-established custom of the Service, but Wilson was not a member of the Court. He was called as a witness; but his evidence was not of importance, as, owing to the *Victoria* having turned end on away from him, and being about eight cables off, he had been unable to observe distinctly the successive stages of her decreasing stability before she capsized. As regards the theory that the Admiral had mixed up in his head, in a moment of aberration, the radius and the diameter of the ship's turning circle, the Captain and the Staff Commander replied in answer to the Court, that it had not occurred to them, and as no other witnesses were in a position to know anything about it, it remained a matter of conjecture, where it must rest for ever.

After sitting for ten days the Court-martial delivered its findings, but on one point that was of great importance to the future, it expressly forbore to give an opinion. Why had the *Victoria* capsized? Ships had been rammed and sunk before, and there could have been few amongst the many spectators who thought she could survive such a blow as she had received from the ram of the *Camperdown*, but that she should capsize within a few minutes was a surprise and a shock to the whole Service when they learned it. It is one thing for a ship to sink, but to have every

chance of escape to those below cut off by the ship's capsizing, is a very different matter. Why it occurred was a highly technical question, and the Court had to be content to state that it had "placed in the minutes all the evidence obtainable with regard to the closing, or otherwise, of the water-tight doors of H.M.S. *Victoria*, but it does not feel called upon, nor does it consider itself competent, to express an opinion as to the causes of the capsizing of the *Victoria*."

As Captain of the sister ship, Wilson was specially interested in this question; he had been making a detailed study of the effect of similar damage to different parts of the ship, by collision or torpedo, and what practical measures could be taken to minimize the risks. As a result, he put forward a proposal to build five additional water-tight bulkheads on the main deck, which in due course was approved, and later in the winter they were built into the ship.

Sir Michael now took the fleet for a cruise in the Levant, leaving Malta in the middle of August, and visiting Nauplia, Phalerum Bay, Volo and Thaso. One of the subjects to which he gave early attention, was the training of the cruisers in the practice of acting as scouts and look-outs for the Battle Squadron on definite principles. A line of cruisers would be extended on a bearing from the flagship at long distances apart, or they would be stationed on the arc of a circle ahead of the fleet, and messages would be passed in and out to practise communicating; but the distances to which they could be extended was much restricted for want of a better means of signalling. The ordinary flags were inadequate to the purpose, as they could not be distinguished; various other devices had been tried without success, and it was now suggested to try a semaphore at the masthead. Describing its inception, Admiral Sir Hugh Evan Thomas, who was then Sir Michael's flag-lieutenant, has written:

"The Commander-in-Chief, being particularly anxious to develop signalling at long distance between look-outs and the fleet, was discussing with me the difficulties and possibilities of fitting a semaphore at the truck which could be both worked and turned round from below. Captain Wilson, who was present, went to his cabin, and in a very short time designed a most ingenious arrangement whereby the difficulties were overcome, and a most successful long-distance truck semaphore was supplied to the whole fleet."

To return to the cruise. On leaving Thaso, the fleet turned southwards for Salonica, and thence went on to Navarino, Patras, Zante, Corfu, Taranto, and Spezzia. The *Sans Pareil* then proceeded to Malta, and having disembarked the Admiral, went into dock.

On the arrival of the new flagship, the *Ramillies*, shortly afterwards, the *Sans Pareil* resumed her status as a "private ship"; the work of fitting the new water-tight bulkheads on her main deck was taken in hand, and Wilson became engaged in the preparation of a lecture to the officers of the fleet and garrison on the subject of improvements in the water-tight subdivision of ships, and in the construction of a model to illustrate it.

An exhaustive examination of the evidence given at the Court-martial, and of all the known facts relating to the loss of the *Victoria*, had been made by Dr. White, the Director of Naval Construction, and the Board had issued a Minute in which it was stated that if all the doors and hatches had been closed, "Investigation shows that while the loss of buoyancy must in that case have been considerable, yet, making all due allowance for damage, the ship would have remained afloat, and under control, and able to make port under her own steam." . . . "The evidence clearly shows that the existence of the longitudinal bulkheads was not the cause of her capsizing; there were only a few minor longitudinal partitions in the fore part of the

ship. Many of these were inoperative because of damage or open doors. . . ."

These statements, while complete enough as regards the case under review, still left untouched the question what would have happened if the collision had occurred abreast the stokeholds or the engine-room, where a central line longitudinal water-tight bulkhead existed. It was certainly outside the scope of the inquiry and report; but Wilson's investigations had already shown him that this was a very vital question to his own ship, and to all others built on the same principle of subdivision, and he felt strongly the need of demonstrating his views to as wide a professional circle as possible.

The lecture was given at a meeting of the Malta Naval and Military Society on the 11th of January, and clearly showed the danger of the centre line bulkhead, but it is too long and technical a paper to be quoted here. It will suffice to say that it was ingeniously illustrated by means of a small floating model, representing the *Sans Pareil* and constructed to scale, into which suitable weights could be dropped to represent the loss of buoyancy arising from damage to the principal compartments, with the resulting changes of heel and trim.

The great social event of the Malta season, the Carnival ball, was held this year (1894) on the 5th of February, and the next morning the *Sans Pareil* and *Dreadnought* sailed for Volo, on the coast of Greece, to join the Levant Squadron. The *Sans Pareil* had recently been inspected by the Commander-in-Chief, and had passed through the ordeal very satisfactorily. It may be mentioned, as a measure of what was then considered a smart performance, that on this occasion she rigged her "all-round net defence" in 47 minutes 10 seconds.

Wilson had been the senior Captain on the station since the loss of the *Victoria*, and now that the Admiral had shifted his flag to the *Ramillies*, he was frequently

detached from the flag as the senior officer of a squadron. It had long been the practice to keep a portion of the fleet in the Levant, and as the Rear-Admiral had just returned to Malta, Wilson was now sent to take his place.

He remained in those waters for two months, visiting Skiatho, Sigri, in the island of Mitylene, and Smyrna, which latter place seems to have been the favoured resort of other foreign squadrons as well, for he met there the U.S. ship *Chicago*, commanded by Captain A. T. Mahan, in addition to a French and a Russian squadron. An expedition was made by a party of thirty-five officers to Ephesus and Magnetia, and football matches were played against the local clubs. After a fortnight here the cruise was resumed to Poros, Kalamaki, and Salamis, and at the end of April Wilson was relieved as senior officer, when the *Sans Pareil* returned to Malta in time to take part in the last few cricket matches of the season.

Sir Michael kept his fleet moving well, and spent the summer first in a cruise to Venice and the Adriatic ports, then to Gibraltar and Palmas Bay in Sardinia, occasionally detaching Wilson with a few ships to visit other places than he had included in his own programme. At Palmas Bay, Wilson was more successful in his boat sailing, winning a special race for galleys, and being second in another when it was blowing hard.

A letter of this time shows what frequent changes had been made among his officers. Writing on the 21st of August from Malta, Wilson said:

". . . We have had a busy week here, coaling and drawing stores and refitting for the next cruise, and leave for Suda Bay (Crete) to-morrow. I am sorry to say I have just had to send ——, my gunnery lieutenant, to hospital with fever. He is the last of the lieutenants that commissioned the ship. Every one has now been changed for one cause or another. There are only four officers now in the wardroom who began the commission in the ship. . . . After

Suda Bay we go to Tenedos to allow the Admiral to visit the Sultan at Constantinople."

He has recorded in his diary some good partridge shooting at Imbros, and that in the fleet regatta at Thaso, the *Sans Pareil* won more prizes than any other ship. A visit was paid to the Greek monasteries on Mount Athos, where celibacy is carried to the extent of not even allowing a female animal to exist on the peninsula, and from there the fleet proceeded to Salonica, where Wilson parted company from the flag to go to Malta.

As soon as the six-monthly cleaning and painting in dock was finished, he proceeded to Corfu, from which place he wrote on the 30th of October:

"We got here on Monday (22nd), and find it very pleasant to be for a short time independent of other ships. The *Cruiser* is here, but I am not required to meddle with her, so I mind my own business, and let her go her own way. I have been twice over to the Albanian coast to shoot snipe, of which there are a fair number to be got in the marshes, though the proper shooting does not begin here till the snow comes on the hills. The King has been here looking after his palace and getting it ready for the Czar. . . . I lunched with him yesterday. . . . A very pretty place, but quite a small house for a palace. After lunch he took me all over it, even to the kitchens, and showed me all he had been doing to make it comfortable . . . It is now very plainly furnished, but comfortable, and according to his account the Czar is not a man who wants much. He said, 'If he has one room to himself it is all he wants; he is that sort of man.' . . ."

The King's efforts were in vain, however, for the Czar died a few days later in his own palace at Livadia.

The *Sans Pareil* went on to Patras, Zante, and Nauplia, and on the 15th of November rejoined the Admiral with the fleet off Cape Colonna, and after

proceeding with him to Phalerum Bay, near Athens, Wilson was left as senior officer in the Levant until the end of January, when the *Sans Pareil* returned to Malta for the remainder of the winter.

On the 9th of February the ship completed the normal period of a commission. It was soon announced that she was to be relieved by the *Barfleur*, and when the date of the latter ship's sailing from England was known, Wilson was ordered to proceed to Gibraltar in time to meet her. The Captains of the ships present gave him a farewell dinner at the Union Club, the Commander-in-Chief gave him a most satisfactory report of his final inspection of the ship, and on the 14th of March the *Sans Pareil* left Malta Harbour, flying her long paying-off pendant with the usual gilded bladder at the end of it, with the universal good wishes of the fleet, and accompanied for a short distance to sea by the Commander-in-Chief and his daughter on board his yacht.

The *Barfleur* arrived at Gibraltar on the 23rd, and after a final dinner-party with his friends on shore, Wilson, following a favourite practice of his, sailed at 11 p.m. He arrived at Sheerness on the 29th, and on the 17th of April, 1895, the *Sans Pareil* was paid off.

CHAPTER VII

REAR-ADMIRAL: TORPEDO MANŒUVRES, ETC., CONTROLLER (1895-1901)

Wilson, being now on half-pay, spent the next two months at home, and in visiting his many friends in Norfolk. In the middle of June he went over to Paris for a week, as a member of the Institute of Naval Architects, who, by the invitation of their French colleagues, were holding their annual meeting there. On his return, he received the offer of the command of an experimental Torpedo Squadron, which was shortly to be assembled to test the qualities of a new type of vessel, called a torpedo-boat destroyer.

The name, though cumbrous, aptly described their purpose, and may be said to precisely define a stage in the development of naval tactics. The first two built, the *Hornet* and *Havock*, of 240 tons, had already given promise of good results, and it was now intended to give a number of the class a comparative trial against torpedo-boats.

Wilson was the senior Captain on the list, but as a vacancy unexpectedly occurred on the 20th of June, he was promoted to Rear-Admiral before he went afloat.

The Squadron that assembled for this experiment in Plymouth Sound, in the latter part of July, consisted of the second-class cruiser *Hermione*, flying Wilson's flag, and her sister ship the *Fox*, twelve destroyers, twelve torpedo-boats, and four auxiliary ships to act as depot ships to the small craft.

Leaving Plymouth on the 28th of July, the first part of the programme, the practice of station keeping and working together, was tried in a fresh westerly breeze

on the way round to Milford Haven. It was a heart-breaking business for everyone, for the boats had neither adequate means of communication between the conning-towers and engine-rooms, nor of accurately regulating the revolutions of their engines; they were enveloped in spray and smoke, so that signals could not be read, even if seen. Station keeping under these circumstances was not found practicable, and after rounding the Land's End, Wilson gave them all a test of their steaming by sending the torpedo-boats ahead first and then sending the destroyers in chase.

On arrival at Milford a week was spent in firing guns and torpedoes, and in preliminary practices to give everyone experience of work at night before the main operations commenced.

The Squadron was then divided into two portions—the English, consisting of the *Hermione*, *Fox*, and the twelve destroyers, and the Irish, of two of the auxiliary ships and the twelve torpedo-boats. This latter force was to be distributed at certain ports on the Irish coast, whence they were to find and attack the two English cruisers, who would be cruising up and down the Irish Sea, while the English destroyers were to prevent their doing so by blockading them in their own ports.

The Irish force was sent away to its ports in due time, and at 10 p.m. on Sunday night the operations commenced. They were actively conducted by both sides for thirty-six hours, and at 4 a.m. on the following Tuesday, when they ceased, the Irish side had lost one auxiliary ship and five boats against an English loss of one destroyer, which was allowed, though admittedly a hard case.

Newspaper correspondents had not been permitted to embark in any of the vessels taking part in these operations, and all information concerning them was ordered to be treated as confidential; but there must have been some bad leaks, for the Press gave fairly accurate accounts of everything that happened, and in

one paper there was published a letter from "a very capable naval officer who took part in the operations" giving his views, that the existing type of torpedo-boat was doomed, and that in future they would be superseded by destroyers. This, in fact, was the main lesson of the operations. In spite of their defects, the destroyers had well justified the expectations of their designer, and the results were a further proof that a vessel a little bigger and a little better was the correct answer to the menace of the torpedo-boat. In his report, however, Wilson confined himself to a statement of facts, which were left to speak for themselves, and refrained from any comparisons, or advocacy of one type of vessel in preference to another.

The lesson did not pass unheeded, for in the next two years provision was made in the Naval Estimates for the building of a very large number of destroyers.

This account may now conclude with the following extract from Wilson's private letter, dated 12th of August:

". . . My destroyers have been watching the torpedo-boats outside the Irish harbours for two nights in very bad weather, to prevent them getting out if they can, and there has been any amount of chasing, the torpedo-boats generally getting the worst of it. I have just had all the Captains on board to find out what everybody did, as most of the work took place in the dark. They are a very haggard and worn-looking lot after their two nights out of bed, and I think they will all sleep well to-night. . . . We have had a great deal of bad weather, but that was just what was wanted to try the vessels. I have finished manœuvres now, and the next three days will be principally taken up with inspections, and then comes the worst part of it all, which is drawing up the report. I expect that will keep me a few days at Plymouth, as we have done a great deal in the time, and the results want a good deal of thinking over. . . . To-morrow evening we are to have our one little bit of play in all this hard work in the shape of a squadron regatta, after working hours. . . ."

The reports were finished before the partridge season commenced, and the "first" found him one of a party at Kenswick, in Worcestershire, with his old friend Admiral Britten. Many other invitations to shooting parties followed, first in Scotland and afterwards in Norfolk, and for the remainder of the year this was his principal amusement.

In the summer of the following year (1896) he hoisted his flag for the annual manœuvres on his old ship the *Sans Pareil*, as Rear-Admiral second in command of the Reserve Fleet, under Vice-Admiral E. H. Seymour, who in his book, "My Naval Career and Travels," has generously ascribed the success of his operations to his second in command, who "devised a very wily plan."

On hauling down his flag he was looking forward to another season's shooting, but shortly before it opened, he was offered the charge of a small mission which was being sent out to Mauritius, to select the most suitable site on the island for a dry dock large enough to take a battleship. He accepted it with reluctance, and started in the latter part of August, taking passage in a French mail-steamer. The climate of the Red Sea was at its worst as he passed through it, and on the 4th of September he wrote:

". . . The thermometer under our double awnings was 97° to 99°, and the wind was going exactly the same rate as the ship, so that apparently there was not a breath of air. Yesterday about noon they played the fire-engine over the awnings to wet them thoroughly, which improved matters a little, and towards evening it fell calm, so that the vessel steaming made a little wind against us, and we began to breathe freer at once. . . ."

The Governor of Mauritius, Sir Hubert Jerningham, was a fellow-passenger on board the steamer, and on arrival at Port Louis he invited Wilson to stay with him at Le Reduit, his official and very charming residence up in the hills, where, as Sir Hubert was

very hospitable and entertained freely, Wilson met all the most influential men in the island, both French and English, under very pleasant conditions. From here he wrote on the 27th of September:

". . . I found the *Cossack* here to attend upon me, and that she had got through a good deal of work already, as Mr. Shield the engineer, who is my colleague, arrived ten days before. . . . The principal question we have to decide is whether the dock is to be on the east or west side of the island. Port Louis, where everything is centred, is on the west side, but it is small and unhealthy, whereas on the east side there is a well-sheltered port with plenty of room in it, called Grand Port, which has never been used for large ships since a battle was fought there in 1810, in which we got the worst of it and lost four frigates. I am invited to-morrow to luncheon in a house where Captain Willoughby, who commanded the *Sirius* in that battle and was captured, was lying wounded by the side of Commodore Duperre his captor, who was also wounded, and where they struck up a great friendship. . . ."

There were, of course, many other factors to be considered besides these. Surveys of land and sea had to be made, borings sunk to determine the nature of the ground at suggested sites, and the facilities of communication with other parts of the island considered, which all took time, so that it was four months before the final decision could be reached that the best site was on the north side of Grand Port.

On returning to England Wilson sent in his report, but it was never even discussed. At the instance of Sir Frederick Richards, the Committee had again reviewed the question of site, and had decided in favour of the dock being placed at Simon's Bay, at the Cape.

Sir John Fisher had now held the position of Controller and Third Sea Lord for five years, and it was expected that he would shortly hoist his flag in the *Renown* as Commander-in-Chief of the North America

and West Indies Station, but nothing had transpired as to who was to succeed him at the Admiralty. Those who remembered the lecture at Malta on the improvements required in the watertight subdivision of ships, looked upon Wilson as the most likely man for the post, and so it proved to be. He announced the news to his friends at home in the following letter, dated the 16th of July:

". . . The First Lord has just offered me and I have accepted the office of Controller of the Navy. It is a very big job to undertake, and will take all my time for the next three years, but I am very glad to have the chance of trying it. It is about the most important post there is next to that of First Naval Lord. . . ."

He spent the next month in informing himself of the state of affairs in his future department, and took over the duties on the 23rd of August, 1897.

The Controller of the Navy is the head of that department of the Admiralty which deals with all matters included in the designing, building, and repairing of ships of war, the manufacture of armour, machinery, boilers, guns, torpedoes, and the provision of stores and mechanical appliances—in short, the entire provision of material for the Navy. He is also the third Naval Member of the Board, which, besides Wilson, was now composed of Mr. G. J. Goschen, Admiral Sir Frederick Richards, Vice-Admiral Sir Frederick Bedford, Rear-Admiral Gerard Noel, and Mr. Austen Chamberlain.

The head of the constructive branch of the department was Sir William White, with the title of Assistant Controller and Director of Naval Construction. Mr. A. J. Durston was the Engineer-in-Chief, and Captain E. F. Jeffreys had just become the Director of Naval Ordnance. These were the three principal branches of the department, but the administration of the dockyards, and the supervision of the ships building under contract in the private yards, were tasks whose magni-

tude and importance had greatly increased in recent years, and now formed important items in the work of the Controller.

To review summarily the whole period of his administration, Wilson, on assuming office, inherited a very extensive programme of ship-building from his predecessor. According to the First Lord's annual statement presented to Parliament in the previous February, it comprised—14 battleships, 8 first-class cruisers, 9 second-class, 10 third-class, 2 sloops, 4 gunboats, 52 destroyers, 8 light draught steamers for special service, and 1 Royal yacht.

Some small reduction in these figures must be made to present a correct statement at the date in question, but even so, the programme remained extensive, and such as to require the full energies of the Controller's Department. Its execution, however, was much delayed by a strike in the engineering trades, which broke out a month before Wilson took office, and lasted into the following February; but whatever our domestic difficulties, the political circumstances of Europe and the Far East only called for further effort to increase the Fleet, and the construction of new ships by foreign Powers required successive additions to our already heavy commitments, to ensure the maintenance of our supremacy. Parliament was not only ready to grant the money that the Admiralty demanded for this purpose, but displayed a keen interest in the progress made in adding to the Fleet.

The evil effects of the strike, however, were felt far beyond the period of its duration, and these were still further accentuated by a subsequent boom in mercantile shipbuilding, which created a shortage of labour. Under these circumstances, there occurred a constant succession of delays in the completion of the ships for the first two years at least. Machinery, boilers, gun mountings, armour, and other important classes of materials were so delayed in delivery, that every

programme of work was dislocated and in constant need of revision, contracts could not be executed to time, and, worst of all, the standard of work fell off and laid the seeds of future failures.

There was also a long programme of refitting and reconstructing the older ships in the Royal Dockyards, and though the labour disputes did not spread to these establishments, progress was hindered by delays in the delivery of machinery and materials, and the work fell into arrear. As the new ships built under the unsatisfactory conditions caused by the strike began to be delivered and brought in fresh work, the arrears increased until it was beyond the capacity of the yards to overtake them. It was seen that special measures would be necessary to deal with this state of affairs, but before any such steps could be taken, Wilson had left office, and this legacy had to be left to his successor.

These untoward events added greatly to the burden of the Controller's duties, but he met them with unruffled patience and coolness. They were beyond his control, and their consequences had to be endured; but on the appearance of trouble of the same nature breaking out in Portsmouth Dockyard, he acted with firmness and vigour, and the agitators were promptly discharged. He was unflagging in his attention to the mass of detail that had to be seen to, arriving early at his office, staying late, and taking papers home with him to his flat in Westminster after the day's work was over; and it was only a characteristic instance of the high pressure at which he was working, when he arrived unannounced, at half-past seven one morning, on board a ship at Chatham to examine personally into some defect in her new boilers.

It was common opinion, that the Controller was overloaded with a number of administrative details which occupied much time and attention that would be more usefully employed in the consideration of wider problems and their issues. This congestion

had increased a good deal in recent years, until the work had outgrown the office, but Wilson took no steps to remedy it by augmenting or reorganizing his staff. He has left no record of his views on this subject, but judging by his character and habits in other circumstances, it may be doubted if he ever thought of it. He already found the routine methods of transacting business slow and irksome; he possessed an untiring industry, an intimate knowledge of detail, confidence in his own judgment, a habit of quick decision, and a rare tenacity in adhering to it; reorganization would take time, and an increase of staff meant more wheels in the administrative machine; he did not consider the evil a pressing one, and was content to go on as before.

To turn from this general survey to a more particular consideration of the principal occurrences during this period, it will be convenient to commence with some account of the designs of the more important of the new classes of ships.

The battleships, as regards their size and the distribution of their armament, remained practically unchanged. The *Majestic* and her sister ships, designed by Sir William White, had met with such wide approval, that they had been copied by most foreign Powers and become a standard type. The improvements in weapons, armour, machinery, and boilers, made in the ordinary course of progress, were introduced into each successive class that was built, and variations were introduced from time to time to obtain particular qualities, as in the *Canopus* class, where the protection was reduced to obtain a lighter draught of water, to enable these ships to pass through the Suez Canal, and again in the *Duncan* class to ensure a higher speed, but in its main features the design was the same in all of them. Under the prevailing conditions of gunnery and tactics there was no call for any other form of development, and the last two ships of this type to be laid down, the *Queen* and the *Prince of*

Wales, were, when completed, the most powerful ships afloat.

The policy of building armoured cruisers had been adopted by the Board in May, 1897, prior to Wilson's joining it, on the recommendation of Sir William White, who had expressed his views in a memorandum to introduce his proposal of a design for four new ships, and of which the following is an extract:

". . . Hitherto the conception generally accepted has been that modern cruisers correspond to and take the duties of frigates formerly serving with fleets. As scouts and attendants on the battleships their place will no doubt be always fairly described in this manner, but whereas frigates in old days took no part in fleet actions, there seems no reason under modern conditions why first-class cruisers should hold aloof if designed and constructed suitably. This has become true largely through improvements in armour and armaments made in the last few years. . . .

"While there is no reason for supposing that the past policy of the Admiralty has been unwise in regard to cruiser construction, there is undoubtedly a necessity for a new departure in view of the improvements made in armour. . . ."

This new doctrine did not pass without criticism, but it came to be accepted afloat, and in all the tactical exercises carried out after these armoured cruisers had been brought into service, they were always given a definite rôle in fleet actions. Further reference to this possible use of these ships is unnecessary here, for the essential fact of the situation was, that the foreign vessels that they were intended to fight were also armoured.

The four ships of this class above referred to came to be known as the *Cressy* class, and the features of the design that need to be noted, for comparison with what followed, were a displacement of 12,000 tons, a speed of 21 knots, and an armament of two 9·2 guns in turrets on the centre line of the ship, one forward and one aft, and six 6-inch guns on each broadside.

On the presentation to Parliament of the next Estimates (1898) the number was increased to six, to which it was proposed to add two more of a new class with a higher speed of 23 knots.

Three alternative plans were therefore prepared for the consideration of the Board. In the first, the armament was to be similar to that of the *Cressy;* in the second, four 6-inch guns, and an armoured screen to protect the ship from a raking fire, were substituted for the two 9·2 guns and their turrets; and in the third plan, the screen was omitted and two more 6-inch guns were added, making eighteen in all.

The second of these was the design that Wilson favoured, on account of the protection afforded by the armoured screen; but as the foreign ships, to which these vessels were intended to be a reply, carried one or two guns 7·5 or 8-inch calibre, he further proposed that two 8-inch guns should be substituted for the two 6-inch behind the screen. His preference for the screen was based on an estimate of the number of shot it would stop at ranges up to 4,000 yards, and by counting each shot stopped as the equivalent of a hit on his opponent, he obtained a result which showed that this design was superior to the others. This argument could not be maintained. Guns were sighted up to 10,000 yards and more; there was no reason for limiting the range to 4,000 yards, and, as with any increase of the range above this the advantage of the screen disappeared, the design was dropped.

On his raising the question of the 8-inch gun, it was pointed out that it had been frequently advocated before as a suitable size of gun for cruisers, but that its introduction into the service had been recently rejected by the Board as an unnecessary addition to the number of calibres already in use. This was the argument that he had used in opposing the introduction of the 18-inch torpedo a few years before, and he accepted it as final. The decision might possibly

have been re-considered had he pushed for it, but the time was short, and the issue uncertain, so he reluctantly decided to recommend the first design, and it was adopted; but before receiving the final approval of the Board, four more 6-inch guns were added to the armament at the instance of Sir Frederick Richards, and the displacement was increased accordingly. The two ships of this programme were quickly followed by two more, and the whole were called the *Drake* class.

The third design was subsequently adopted with modifications for another class, of which the *Essex*, *Kent*, and *Monmouth* were examples, carrying fourteen 6-inch guns, four of which were mounted in pairs in a novel manner on what was called a twin mounting. These pairs were placed on the centre line of the ship, one forward and one aft, and it was claimed that, by this means, two more guns could be brought to bear on each broadside than if they were mounted separately. The plan was regarded with distrust by the Gunnery School from the first, but in the absence of an 8-inch gun, it seemed to promise an advantage, and was adopted for this class. Experience at sea later on showed that the claim for an increased fire was negligible, as the two guns interfered so much with each other that the pair was little better than a single gun.

The armament of a ship, however, is not the sole test of the success of her design, and if the ships of this class carried a blemish in this one respect, in other features both they and the *Drakes* were very satisfactory additions to the Fleet.

The other classes of ships need but little comment. The building programme referred to above was completed, and two second-class cruisers designed for a speed of 21 knots were laid down in 1900-01. As regards third-class cruisers, it must be noted that while Wilson admitted their usefulness, he strongly disapproved of building any more. These vessels were intended to act as scouts to the heavier cruisers,

or as links in the chain of communication between them and the battle-fleet, and therefore required a high speed, which, on the limited tonnage permissible, could only be obtained by adopting the light form of construction and the type of engines used in destroyers, at the sacrifice of their sea-going qualities and endurance. He considered the difficulty insuperable, and wished to increase the size, but this was not agreed to. His opinion was, however, so far accepted that only one more vessel of the class was laid down during his administration.

A new class of destroyers was increased in size up to 360 tons, and in speed up to 30 knots, and two of them were specially designed to carry Parsons's turbine engines, while one of the older boats was experimentally fitted to burn oil fuel. Lastly, as France was reputed to have obtained considerable success with her latest submarines, an order for five of these boats, of an American pattern, was quietly placed with a private firm in September, 1900, without obtaining the publicity of Parliamentary sanction.

We can now turn to the subject of boilers.

In 1895, the improvement in both power and economy resulting from the adoption of triple expansion engines to propel ships, was calling for an increase of steam-pressure in the boilers, but the pressure required was much above what shell-boilers could be built to stand, and if the full benefits of the improved engines were to be obtained, water-tube boilers would have to be used. Many patterns of such boilers were in use, afloat and ashore, some with large and some with small tubes, but, so far, not one of them had been found entirely satisfactory as a marine boiler; and when the Admiralty, after a series of trials in a gunboat, decided to instal Belleville boilers in the two new cruisers, the *Powerful* and *Terrible*, there was a considerable opposition, partly composed of vested interests and partly of honest conviction, which prophesied that only disaster would result. The Admiralty, however,

were by no means without support for their policy from a number of influential engineers, and in their succeeding building programmes water-tube boilers were definitely adopted.

This was the origin of that long-drawn dispute which became known as the battle of the boilers.

On the completion of the *Powerful* the criticism of the opposition became active. Her performances on a voyage round the Cape to China were closely watched, and every adverse report which appeared in the Press, or could be obtained from correspondents, was seized upon to discredit and condemn water-tube boilers in general. Small defects of engines, not uncommon in a new ship, were attributed to the new boilers, no allowance was made for the inexperience of the stokers in their management of them, lurid accounts of the insupportable heat of the stokeholds were given in Parliament, and it was even asserted that the Admiralty feared to run the ship at full speed, as she had only made the passage out in the usual way at economical speed. As each successive class of ship carrying these boilers was sent to sea, these criticisms became more active and implacable. The leader of this opposition in Parliament was the Member for Gateshead, Mr. Allan, who showed an unrivalled persistence in adhering to his opinions, and whose professional knowledge and experience as an engineer, combined with a blunt, good-humoured manner, always obtained him a hearing. Failures there undoubtedly were; they were inevitable under such new conditions of greatly increased pressures, but though the Admiralty were confident that the principle was sound enough, and claimed that only time and experience were needed to overcome the difficulties, this ceaseless drip of criticism had produced its effect. If it had occurred alone, it might perhaps have been ignored, but taken in conjunction with other circumstances, it shook the public confidence, and on the 17th of July the First Lord announced:

". . . I know that whatever I say will not have the effect of allaying the public uneasiness. Partly on account of breakdowns, due to numerous small defects which cannot be appreciated by people generally, but defects which honourable members by eloquent speeches know how to magnify, a feeling of uneasiness has been created in the public mind . . . and seeing that from many quarters not hostile to water-tube boilers, but friendly and sympathetic quarters, it has been urged upon me that the country would like to have what they call an impartial verdict on the water-tube boiler, I will consent to an inquiry by a committee on the subject. . . ."

The other circumstances just referred to as factors contributing to the public uneasiness were—first, an incident that was euphemistically described as an accident to the Royal yacht; and secondly, a violent agitation promoted by the Navy League about the arrears in shipbuilding.

The construction of the Royal yacht was a legacy inherited from his predecessor, who had made it almost a point of honour that the work of designing and building her should be entrusted to the Controllers' Department rather than that it should be placed out under contract with some private firm of repute and experience in the building of such vessels.

She had been built accordingly at Pembroke, and on the 3rd of January, 1900, was ready to be floated out of the dry dock, but on the admission of the water, when nearly afloat, she took a heavy list to port and lay with her bilge resting on the floor of the dock.

She was top-heavy.

She was got upright by means of ballast, and having been satisfactorily tested to ensure her safety under these conditions, left for Portsmouth on the 18th of January. Immediately on learning what had happened, Wilson had gone to Pembroke to see for himself what could be done, and now, on her going to sea, took passage in her in company with Sir William White. A rough sea was experienced on the way

round, but the ship behaved well, and both he and Sir William considered that, with certain alterations, she would fully realize the aim and purpose for which she was designed.

This opinion was made public and an inquiry was instituted into the causes of the accident, but it was late to overtake the alarm and suspicion which had been created, and there was a danger that the issue might be decided and the ship condemned prematurely and without adequate reasons. Wilson therefore sought an audience with the Prince of Wales, when he laid the whole case before him. This relieved the situation and on the 26th of January he wrote:

". . . I am very glad I did, as he had evidently been told that things are worse than they are, and he seemed glad to talk over the whole matter. It is bad enough. The Queen was very kind to Mr. Goschen, and said how sorry she was for Sir William White, but I think she is very much disappointed. . . ."

The accident was proved to be due to the weights of the materials worked into the hull and equipment being in excess of those estimated and allowed for in the design. The total amount was considerable, but it was distributed over a large number of items, and it was found that without much structural change, though with a slight decrease of speed, the ship could be made in all respects fit for her purpose.

The necessary calculations and the drawing of new plans took time, and their consideration added greatly to the worries of an over-worked Controller, who was handicapped by the failing health of his chief assistant, but in the meantime rumour and suspicion continued and multiplied to such an extent that it was semi-officially suggested that she should be converted to some other purpose, and a new vessel laid down. Mr. Goschen succeeded, however, in overcoming these objections, and the final result, as will be seen later, was most satisfactory.

In addition to fulfilling the useful purpose of encouraging the study of naval affairs and of educating public opinion as regards our maritime interests, the Navy League had become a keen critic of the administration of the Navy, and as such was frequently expressing its dissatisfaction with what it considered the insufficiency of the building programmes, and latterly with the delays in their execution. The campaign of agitation which it now promoted commenced when it appeared from the annual estimates presented to Parliament in February, 1900, that a reduction of £400,000 had been made in the shipbuilding vote, as compared with the previous year. It opened with a leading article in the *Journal*, the organ of the League, which stated that "the facts revealed by the First Lord's statement have caused something like consternation among those who recognize the immense importance of maintaining the strength of our fleet . . . it is plain that no confidence whatever can be placed in the Admiralty proposals. . . ."

A letter was sent to the Press throughout the country calling attention to the arrears in building, and representing that, of the money voted in the last three years, £3,500,000 had not been spent.

A public meeting was held, at which the First Lord's statement, that the resources of the country were unequal to a further increase of naval defence, was challenged, and the opinion of a number of leading manufacturers quoted to the contrary.

Sandwich-men paraded round the streets of London, bearing placards headed "Death Traps," and professing to give a list of ships armed with obsolete muzzle-loading guns. Handbills to the same effect were distributed to the spectators at the Royal Military Tournament, and the public interest was stirred up by constant references in the Press to the alleged shortcomings of the Admiralty.

It was useless for Mr. Goschen to protest against such methods, and to point out the fallacies on which

the criticisms were based, and how erroneous and misleading they were. Neither protests nor arguments were listened to, and the campaign was continued until, in October, the country was told in a manifesto, which *The Times* described as hysterical, that "the management of our marine affairs for the last five years has been incompetent. . . . We have lost the command of the sea."

The defence of the Controller's department, which had to bear the brunt of these criticisms, fell on Wilson, who, convinced of the justice of his case that everything possible had been done, only became more stubborn and determined in upholding his view as the controversy proceeded. He was well supported by Mr. Goschen, but he never either forgot or forgave his opponents of the Navy League.

Parliament was prorogued in August, and such interest as the public had taken in the dispute was soon swamped, in spite of the efforts of the League, in the excitement of a General Election on the Government's policy and conduct of the war in South Africa. It was called the Khaki Election, and resulted in the Unionist party returning to power with a slightly increased majority. The Government therefore remained unchanged, but Mr. Goschen, who, notwithstanding recent criticisms of his administration, was one of the most successful First Lords who ever presided at the Admiralty, took the occasion to retire from office.

He was succeeded by Lord Selborne, who at once invited the sitting naval members of the Board to remain in office with him, Mr. Pretyman being appointed at the same time to relieve Mr. Austen Chamberlain as Civil Lord.

Parliament was summoned to assemble for a short session in December, and in anticipation of a very probable demand for an inquiry into the subject of the arrears of ship-building, the First Lord called a meeting of the Board to consider a proposal to appoint

a committee at once to go into the question, assuring Wilson that he specially desired his full concurrence with this procedure, and that no fair-minded man could possibly consider it as implying the smallest reflection on the zeal and capacity of his department.

The committee was also to ascertain whether the Controller was hampered by customs and forms which had grown up in past years or had been imposed by the Treasury or Parliament. This was a judicious step, which later on produced good results; but when Parliament met, the First Lord was pressed for information as to the proceedings and findings of the Water Tube Boiler Committee, which had been sitting since September, and eventually he had to consent to call for an "ad interim" report.

This was rendered on the 22nd of February, and in answer to the three specific points on which the committee had been told that information was desired, it stated that water-tube boilers would be more suitable than cylindrical boilers if a satisfactory type could be found.

The Belleville boiler did not possess such advantages over other types as to lead them to recommend it as the best, and they recommended that no more be installed in future.

Lastly, they recommended that four other types should be tried.

It was an inherent disadvantage of this hurried procedure that these opinions were put forward without any statement of the evidence on which they were based. They amounted to a condemnation of the Belleville boiler which would carry great weight in the country, but the report afforded no means of estimating their value.

Wilson had feared some such result as this from the first. He had wanted a series of practical trials carried out at sea under the direction of two independent engineers who would investigate all the questions involved, and not a committee merely to sit and collect

evidence, but he had been overruled. The Belleville type had been adopted as the Service boiler after a due examination of its merits and demerits, and there were at this time 1,500 of them on order. Truly, as Lord Selborne said, the position was difficult and serious.

On consideration of the report and of a minute from the Controller stating the other side of the question, the Board decided to suspend all orders for these boilers pending further investigations and inquiries, and Wilson agreed with this decision as a member of the Board, but he strongly urged that a second minute which he had drafted should be published with the report as a statement of the facts which must be taken into account before a fair judgment on either past or future policy could be formed, and which therefore should be made generally known before the report was commented on by Parliament and the Press, for he considered that to publish the report without any qualifications would raise an outcry against the Belleville boiler and those responsible for it by unfair means.

In writing to Lord Selborne to urge this proposal, he said that unless some such step was taken he feared his position would become impossible, but Lord Selborne could not agree to it. He pointed out that the suggested action would make the position of the Board itself impossible, and asked how the Board was to carry out its policy or command the confidence of the public, if at the same time that it announced its decision the officer through whom it had to act frankly stated that he did not attach the same importance to the report as his colleagues did, and by unmistakable inference dissented from their conclusions.

Wilson dissented from this view entirely, and wrote again to explain and emphasize the advantage of the line of action he proposed, but to no purpose ; the responsibility lay with the First Lord, and he adhered to his decision. The situation was decidedly strained,

and there is a note of weariness in a private letter of this date:

"The battle of the boilers goes on merrily. I got a message from the King to say he wanted a lot of alterations in the yacht, and that I was not to hurry completing her. I wish I could get her off my hands. . . ."

His wish was unexpectedly granted, and the situation relieved a few days later by Lord Selborne offering him the command of the Channel Squadron in the following terms:

"ADMIRALTY,
"WHITEHALL,
"18*th March*, 1901.

"DEAR ADMIRAL WILSON,

"I saw the King on board the *Victoria and Albert* on Saturday, and he discussed with me the question of the command of the Channel Squadron which is now vacant. I asked his permission to offer the command to you, and as he expressed his strong approval I now have great pleasure in doing so. I am glad to be able to do this, because I do not believe I could find an officer more fitted for this great command than yourself; but I do not think I should be treating you with the respect due to you, or consistently with the friendly personal relations which have existed between us, if I did not tell you frankly that I am glad for another reason also.

"You and I differ seriously on the boiler question, and I am sure that the public service must suffer when the First Lord and the Controller differ on a matter so important.

"My policy may be right, or yours may be right; but mine worked by you (or yours by me) must fail.

"I have put the matter as between you and me for the sake of conciseness; but, as a matter of fact, the Board agrees with my policy, and this only enhances the force of my argument.

"The second reason, therefore, why I am glad is that this appointment to the Channel would relieve us both from a difficult position.

"One word more in conclusion. Should you desire to publish your views on the boiler question in a short

interval of half-pay between the two appointments, I should offer no objection; but I venture to suggest that you should consult our naval colleagues before doing so.

"Believe me,

"Yours very truly,

"SELBORNE."

The offer of this appointment, so frankly and courteously made, was promptly accepted by Wilson, who wrote, in reply, a letter of which the copy is undated:

"15, ST. ERMIN'S MANSIONS,

"WESTMINSTER.

"DEAR LORD SELBORNE,

"I received your kind letter yesterday at Portsmouth. I shall be very pleased and proud to accept the command of the Channel Squadron, and to do my best to follow in Sir Harry Rawson's footsteps. I also fully appreciate the force of your remarks as to our difference of opinion on the boiler question.

"Being relieved from all responsibility with regard to that question, I see no necessity for publishing my views, and I should be very sorry to do anything that might hamper my successor in carrying out whatever he thinks best. I would, however, beg both you and him to give careful consideration to the views of the Engineer-in-Chief as well as to those of the Committee. I shall be ready to turn over the work to my successor whenever convenient to you and him.

"Yours truly,

"A. K. WILSON."

The duties of his office were quickly transferred to Rear-Admiral W. H. May, who was moved up to succeed him from the post of Director of Naval Ordnance, and Wilson went away on a fortnight's leave before going to sea.

CHAPTER VIII

REAR-ADMIRAL COMMANDING: CHANNEL SQUADRON (1901-1903)

On the 18th of April, 1901, Wilson hoisted his flag in the *Majestic* at Portsmouth as Rear-Admiral commanding the Channel Squadron in succession to his old friend Vice-Admiral Sir Harry Rawson, and a few days later sailed to join the Squadron at Berehaven on the south-west coast of Ireland, which then consisted of the eight battleships *Majestic*, *Magnificent*, *Mars*, *Jupiter*, *Hannibal*, *Prince George*, *Resolution* and *Repulse*, and of the cruisers *Diadem* and *Niobe*, *Arrogant* and *Furious*, and *Pactolus* and *Pelorus*.

As soon as the ceremony of receiving the official visits of the Rear-Admiral and Captains was over, he commenced a tour of the Squadron, visiting each ship in succession, having the officers presented to him and walking round the divisions in which the ship's company was assembled, so that he might announce his presence to them, and they might know their Admiral by sight in future.

Among Rawson's many active efforts to improve the gunnery of the Squadron was one to provide a rifle range on Bere Island, but as he had failed to get the work carried out by the Works Department, he had commenced it with labour from the ships, and on giving up his command had commended it to Wilson, who now spent his first afternoon in inspecting the ground and progress of the work, and incidentally showing his new Staff the rapidity with which he both walked and made up his mind. In an hour and a half at most he went over the whole site and settled the entire scheme of firing-points, shelters, trenches

and dining-hall, as well as how to extend the ranges and number of targets if it was required to do so in future. It illustrated a trait in his character and has therefore been recorded; but what everyone was looking forward to with critical interest was how he would handle the Squadron at sea.

On the first occasion of going out of harbour he introduced a new practice by taking the Battle Squadron out in two lines instead of one, as had always been done before. The advantage of this lay in the shortening of the time getting into open water and forming the Squadron in cruising order, also by coming in in this formation all the ships were able to get into their proper stations in time to anchor simultaneously. It was a decided improvement on the old way, and when, a year later, the German Fleet under Prince Henry met the Squadron at Berehaven, and saw it go out in this way, the Prince was quick to see its advantage and to imitate it.

Another improvement that Wilson introduced at once was a simple rule for altering course or wheeling, when the Squadron was in two or more columns abreast of each other. The previous method aimed at a theoretical perfection which was never attained in practice, and needed reference to a table which prescribed the exact course and speed according to the number of points to be turned; but tables that had to be consulted at night were an abomination to him, and he substituted for them a rule of thumb which everyone could remember.

Early in May a cruise was commenced round the west coast of Ireland, calling at Killary Bay, Lough Swilly, and Lamlash, and accompanied by a flotilla of torpedo-boats. Each of these boats was manned and looked after by a parent battleship, and during the cruise repeated efforts were made to devise a satisfactory and safe means of towing them but without success, though the experiment was worn rather threadbare before being given up. Tactics were

frequently practised, but after a few movements to train the eye and determine helm angles they were always of a more practical nature than a mere exercise in the rules and formations laid down in the Signal Book. Either the columns were exercised against each other, or the Squadron was exercised in forming into line for battle.

On arrival off Plymouth, the ships were dispersed to their home ports to refit and give leave before the annual mobilization and manœuvres, and on the 24th of May Wilson was promoted to Vice-Admiral.

When the Squadron re-assembled at Portland in July, it was increased in strength by the addition of a number of mobilized cruisers, gunboats, destroyers, and torpedo-boats, for the operations which were to ensue against the Reserve fleet under the command of Sir Gerard Noel.

The objects of the two Admirals and the dispositions they made to effect them are all fully described and discussed elsewhere, as correspondents of the Press were allowed to attend, and there is no need to describe them here; but there occurred one or two incidents which are well worth relating as illustrative of Wilson's bold and masterly methods of handling a fleet.

Having come down through the Irish Sea in thick, misty weather at high speed, he arrived off his base, the Scilly Islands, to find it enveloped in a thick fog. The entrance to the harbour is marked by a lighthouse on the Bishop Rock, whose sound-signals could be plainly heard, though nothing could be seen. From the lighthouse, the channel lies between islets and rocks to a buoy, where a small change of course has to be made to reach the anchorage. Having formed the battle fleet in single line ahead, he stood in, and, having sighted the lighthouse, steered for the buoy, making the signal "Anchor instantly," but reserving the executive order to do so. Many eyes were watching on the bridge for that buoy, and just as the Admiral

was about to give the order to make the executive sign, it was seen where it was expected. This gave him the necessary assurance as to his position; the signal to anchor was annulled, and the fleet was safely led to the anchorage, where the weather was found to be much clearer.

A second instance occurred a few days later. The "enemy" were blockading a small force in Alderney, and Wilson determined to try to effect a surprise and drive them off, but as his opponent was known to be in Portland with his battle fleet, he had to take his whole force to do it and to act with celerity and secrecy. A fog prevailed all the afternoon of the day that he intended to start, but it lifted about 6 p.m., which, though late, was still early enough to get between Portland and Alderney by daylight if he went fast. He sailed and steered for the middle of the Channel with his fleet in two columns, and had just time before the fog closed down again to give orders that the fleet was to proceed at 13 knots during the night, showing no lights at all, and was to alter course for the Rendezvous without further signal at 9.30 p.m. The operation was carried out without a hitch, the weather cleared during the night, and on arrival off Alderney the next morning the whole of the "enemy" force was captured.

The final act of the manœuvres was a highly interesting action between the two battle fleets, in which each side scouted for and approached his "enemy," and then deployed into line and engaged him. It was a novelty, for hitherto such actions had been excluded from practice by conventional rules to ensure safety. Such rules may have been behind the times, but they were at least a logical sequence of regarding the ram as a weapon, and of continuing to build ships with them; the idea of ramming, however, if not dead, was moribund, and safety was ensured by a simple rule that if any two opposing ships approached within a mile of each other, they were both to turn away. Gun

and torpedo fire was recognized as the determining factors.

The principal lesson of this action was the interference with gun-fire that was caused by frequent alterations of course, for while Wilson kept his fleet in single line and slowly tried to work round the head of the "enemy's" line, the latter kept altering his direction by a movement in subdivisions which required frequent changes of course and speed, and thus rendered it impossible for the captains of the guns to keep their aim on an opponent. This and much else is all very plain now, but with target practices in such an undeveloped state as they then were, what the guns could or could not do was largely a matter of conjecture.

A short interval elapsed after the termination of these "hostilities" before the Channel Squadron proceeded to meet the Mediterranean Fleet at Lagos on the coast of Portugal. The need of an occasional meeting of the two fleets for practices together and for the exchange of ideas, in anticipation of their probably being combined in war, had been urged by Sir John Fisher and readily concurred in by Wilson, and this being the first occasion of such a meeting, Sir John had made great preparations to insure that it should go with a "snap." Sheets of instructions, plans, organizations and information had been sent out in advance, and a programme was now issued for all the official receptions and dinners, the competitive drills and boat races (which provided so much of the fun), and lastly for a series of exercises in this new practice of two battle fleets approaching and engaging each other.

The two chief figures of this meeting, Fisher and Wilson, presented a remarkable contrast: the latter self-restrained, reserved, silent and thoughtful, but watchful and attentive, with everything about him denoting a simplicity of life and habit; while Fisher loved to contrive a dramatic effect about everything he did. His flagship, the *Renown*, had been specially fitted

for him, and carried a fore top-gallant mast to fly his flag higher than anyone else's; he had a special barge, which was said to have excited the envy of the German Emperor; the furniture and decorations of his cabin were more like those of a luxurious yacht than of a man-of-war, and he now greeted the strangers to his fleet with a frank and easy air of hospitality as if their entertainment was all he had on his mind.

Having assembled them all in his cabin the first morning after their arrival, he proceeded to explain the objects of the meeting and the need of being always prepared for war in a long and lively address. Wilson sat in his armchair, smiling and amused at the anecdotes and illustrations with which the address was accompanied, but making no comment. Finally, Sir John described how the fleet would be formed up and brought into the anchorage with every ship in exact station on the flagship, ready to anchor simultaneously, and concluding with the remark:

"The flagship reduces speed to 6 knots at one mile from the first anchor, you can bet your last shirt on that." Alas!

> "The best laid schemes o' mice an' men
> Gang aft a-gley."

On the next occasion of the fleet returning to its anchorage, it was thrown into considerable confusion by finding the place occupied by a fleet of fishing boats, and most of the ships had to anchor independently.

As Sir John had reserved to himself the position of Chief Umpire, the antagonists in the earlier sea exercises were the next two senior flag officers, Wilson and Lord Charles Beresford, the latter of whom won the toss for the choice of 10 or of 12 knots speed, and had thus a slight advantage. The procedure was for the two fleets to separate out of sight of each other, and at a given time to turn and steer for a definite point which would bring them together again, after which, as soon as they sighted

each other, they were free to commence their tactical movements.

On the first occasion, Beresford approached with his fleet in single line ahead, but Wilson retained his in cruising formation, that is, in columns of divisions in line ahead disposed abeam, until he had sighted his opponent, when he formed the columns on a line of bearing from himself at right angles to the bearing of the "enemy's" centre, and kept them so until the moment arrived to deploy into line. By this means, as soon as Beresford showed which way he intended to turn, Wilson turned in the same direction and brought as many ships as there were columns into action for each one of his opponent's and thus obtained an advantage in the opening move. As soon as the two lines were formed Beresford made use of his superior speed to try and get across the head of Wilson's line, to cross the "T" as he afterwards expressed it, but as Wilson always turned away the fight soon resolved itself into one fleet circling round the other without any advantage to either.

Other methods and formations for approach have often been tried since, but this one which Wilson thus introduced has held good, and, in principle, was the method used in the deployments of the Grand Fleet during the war.

Besides another sham fight between Wilson and Beresford every flag officer present was given an opportunity to practise and test his ideas of how to open and conduct a battle between two fleets, and while the fleets were at anchor the two Chiefs were conferring privately and arranging their plans for future combinations.

Sir John had recently been carrying out two exercises with all the ships of his fleet that he could muster, with the object of obtaining experience as to what precautions should be taken by a Battle Squadron against torpedo craft; how cruisers and destroyers could be utilized to prevent such attacks, and how

destroyers could be maintained and coaled at sea away from a base. The operations had been most carefully planned to represent the action the Mediterranean Fleet would have to take to meet reinforcements from home on the outbreak of war, and certain deductions had been drawn from them, and advanced as conclusive arguments in support of his insistent demand for the strengthening of his fleet. He had written that he had—

". . . come to the definite conclusion that the fleet must stop at night, and the battleships with their nets out form a laager, inside which must be collected the cruisers and other vessels unprovided with torpedo-net defence. When a sufficiency of destroyers is provided this arrangement may be altered. . . . All first- and second-class cruisers must be provided with net-defence. . . ."

Further deductions followed on the conclusion of the second exercise, in which the conditions had been purposely made unfavourable to hostile torpedo attack, but which showed, so it was claimed, that the Mediterranean required a large increase of destroyers with fast leaders and depôt ships for each division.

The reports of these operations and the lessons drawn from them had been sent to Wilson before he left England by the Admiralty, with a request for any remarks he might have to offer on them, and, as will be seen from the following letter dated the 9th of October, they formed the subject of a very free discussion between him and others during the meeting.

* * * * * *

"2. These operations were undoubtedly of great interest, and very useful in assisting officers to estimate the dangers of attack by destroyers and torpedo-boats under the conditions supposed.

"3. The value of these operations is in the experience gained by all classes of officers engaged in carrying them out, but it is a mistake to draw deduc-

tions from them that are not strictly borne out by the circumstances.

"4. The operations show that it would be very dangerous to take a fleet at night along an enemy's coast well provided with torpedo-boat stations, especially if the enemy were forewarned of the time the fleet would pass, but they throw very little light on the best way of protecting a squadron from torpedo attacks. They certainly do not show that an increase in the number of cruisers and destroyers attached to a fleet would increase its safety in this respect.

"5. All previous experiments have shown that the best safeguard for a fleet at sea from torpedo attack is not to let its position be known, in which case, on nights suitable for torpedo attack, the destroyers or torpedo-boats would generally have great difficulty in finding it.

"6. The tracking of the squadron by the débris thrown overboard is an interesting point, and indicates the necessity for precautions under certain circumstances that might otherwise not have been thought of.

"7. The operations give no evidence whatever in favour of many of the deductions drawn from them. They throw no light whatever on the best way of dealing with torpedo-boat stations, or on the use of fast depôt ships, special colliers, hospital ships, distilling ships, etc., or the effect of such impedimenta in hampering the movements of a squadron, and very little as to the conditions under which destroyers can be used.

"8. In other cases deductions are drawn without sufficient consideration of what is involved, such as the recommendation to provide nets for armoured cruisers, and to provide improved Salamanders of 25 knots speed.

"9. I discussed all these points very freely with the Admirals and other officers of the Mediterranean Squadron, and as I came to an entire agreement with the Commander-in-Chief as to the course to be pursued in the event of war with our present knowledge, and as to the further operations which should be carried out to determine the most important points in which we were in doubt, it seems unnecessary and unadvisable to enter into a controversy on the debatable point in these papers. . . ."

Fisher's young men would have raised a chorus of disapproval of this cold douche on their aspirations had they known of it, but that may pass; Wilson had obtained a stay of execution, and the two Chiefs, in spite of the differences in their styles, were in agreement as to the form of the next step to be taken to throw light on the problems at issue.

After a fortnight's crowded experience, the whole fleet put to sea for a short exercise in steam tactics, on the conclusion of which the Channel Squadron parted company and proceeded to Gibraltar to spend a few days in coaling, in discussing recent events, and in enjoying the amenities of Algeciras before returning to the comparative desolation of Berehaven.

The Squadron reached Berehaven on the 26th of September, and resumed its ordinary routine. It was a place much frequented by the Admiral, as he found it admirably adapted to the purpose of training the Squadron in sea habits, accustoming everyone to live on board, and teaching the ships to rely on their own resources. Being well sheltered and secure, easy of quick access from the open sea, in direct telegraphic communication with London, with good supplies readily obtainable in the neighbourhood, it was quite free from any social or domestic distractions to interfere with the routine of a sea-going ship ready for immediate service at any moment. He always obtained the services of a gunboat or of a couple of destroyers to run the mails to and from the railhead at Bantry, and provided plenty of variation in occupation, either by sending the ships to sea or by taking them out himself for a day for some experiment or practice. He was keenly alive, however, to the importance of recreation on shore for everyone, and took an active part in the planning of a recreation-ground for cricket, football, and tennis, and when it was completed he played in the opening cricket-match.

His principal diversion at Berehaven and elsewhere consisted of long walks about the country, generally

alone; but he entertained frequently on board his flagship, both here and elsewhere, kept a good table, and was a pleasant and agreeable host. These dinner-parties included many other officers than the Admirals and Captains, and any young lieutenant in the Squadron who had served under him before was sure to be invited as soon as his presence was known. At his table he was more of a listener than a talker, enjoying any stories told, but seldom telling one himself, and never dominating the conversation. He thus kept himself well informed of the characters of his young men and of the pursuits in which they were interested.

To conclude this digression and resume the chronicle of events, except for a short cruise round Ireland, the Squadron remained at Berehaven till the end of October, when Their Royal Highnesses the Duke and Duchess of York were due to arrive from their tour round the Dominions on board the *Ophir*. Wilson had been ordered to take the Squadron out to meet them and escort them up Channel, and on the 29th put to sea to do so. The following letter gives his own account of the proceedings.

"R.N. CLUB, PORTSMOUTH,
"*Saturday, 2nd November,* 1901.

". . . I have seen the King and the Duke of Cornwall safely away by train this morning, and I feel considerably relieved. Everything has turned out very well, but I had several anxious moments. I had arranged to meet the *Ophir* about 50 miles south of Cape Clear at 1 p.m. on Wednesday, and had made my arrangements accordingly; but at 3 o'clock in the morning I got a wireless message to say the *Ophir* would be at the Rendezvous at 9.30. We eventually met at 7.45, and although the pretty manœuvre I had arranged for joining went off all right, most of the people intended to see it were in their baths. The Duke himself got on deck just as we fired the first gun of the salute, but the Duchess and her ladies saw nothing. Matters would have been no better, however, if we had been later, as the wind was rapidly increasing, and in the following night it was blowing a

very heavy gale. In the middle of the night I got a wireless message from the King, asking that we should not get into Portland much before nightfall, as it would spoil the effect of the arrival at Spithead if there were any preliminary ceremonies at Portland. I passed it on to the Duke, but I don't fancy either he or the Duchess relished the thoughts of remaining longer at sea in such weather than they could help, and certainly wherever we went there could be no ceremonies, so we only eased speed a little. In the forenoon the Duke decided that it would not be safe to take the *Ophir* into Portland, so he signalled that he was going to Totland Bay, and that he would meet me in the morning wherever I liked to name. I had told the King that I did not consider it prudent to take the fleet through the Needles, and he had agreed definitely to abandon the idea, but it would never have done to let the *Ophir* go in and have to come out again in the morning to meet the fleet, so I signalled that I would take the fleet to Yarmouth Roads and come and see the Duke at Totland Bay as soon as they were safely anchored. He replied that he would come to Yarmouth Roads too. We got in all right, and I went on board to see him. Both he and the Duchess gave us a very warm welcome, and we had to arrange as to telegraphing to the King to alter the programme for the next day. In the evening I and all the Captains of the Squadron dined with the Duke and had a very cheery dinner. Everybody was very pleased to be in smooth water again and in the best of spirits. Just as I was leaving dinner I got orders for the Squadron to be at Spithead in time for the King to pass through the lines on his way to Yarmouth Roads at 10 a.m. and again on his return to the *Ophir*, so we had to start off again at daylight and we got into position in plenty of time. You will see all about the ceremonies in the papers.

"Last night I dined with the King on board the Royal yacht, and was delighted to find a complete change in his opinion about her. He was delighted with the vessel and the comfort of all arrangements and with her behaviour in every way, and I was told that the Queen was too. The King and Duke of Cornwall made two admirable speeches in drinking each other's health, and everything went off very pleasantly. . . .

"I start for Portland at daylight on Monday morning and remain there till the 22nd, when we go to our ports for refit and I hope to get some leave. . . ."

He was greatly pleased with His Majesty's approval of the Royal yacht, and he showed it plainly by his references to it in conversation the next day.

The ships were dispersed to their home ports for Christmas as he has indicated in the above letter, and on reassembling again on the 1st February, 1902, the Squadron, reduced in strength by the withdrawal of two battleships, sailed for the North-West Coast of Spain. The usual fine winter climate of Vigo and Arosa Bay, which is one of the attractions of this coast, was, however, interrupted this season by an almost constant succession of westerly gales of wind and rain. On reaching Tetuan on the Moroccan coast there was a promise of improvement, but the next afternoon a strong Levanter blowing on to a lee shore drove the ships to sea again. These disagreeable conditions interrupted the work a good deal, but they were not allowed to interfere with the published programme of movements, and after a visit to Palma in Majorca, the Squadron arrived at Gibraltar on the 15th of March.

An incident happened during this visit which caused some amusement, at least to the sailors. The upper part of the Rock was strictly guarded from the intrusion of strangers by a number of sentries, beyond whom no one could pass without a permit from the military authorities. While out for a walk one Sunday afternoon with the General, the Admiral and he were stopped by one of these sentries, who asked for their passes. They were both in plain clothes, and the sentry knew neither of them. Wilson handed him a paper, and after the sentry had glanced at it and allowed them to proceed, put it back into his pocket; but after going another quarter of a mile he took it out again, and having looked at it, handed it laughingly to the General. It was a blank telegraph form!

The Squadron put into Corunna and Ferrol on its way north, and arrived at Berehaven at the end of April. A few days later a German squadron under Prince Henry of Prussia came in two days before they were expected. It was a surprise to both squadrons, and there was not much room in the haven for the German ships to manœuvre in, but they were well handled and took up their anchoring positions and moored in a very seamanlike way. As Wilson has related the account of this meeting with the Prince in a private letter, it will be given in his own words.

" . . . It had been arranged that he was to arrive on the 8th and I was to leave on the 7th and leave the harbour clear for him, but he had no idea I was there at all, so the meeting was a surprise to both. I had sent all the marines on shore for a field-day up in the mountains, and I was on the point of starting with some sandwiches in my pocket to spend the day on the hills with them, when the signal-station reported a squadron in sight. As he was a long way off I went up to the hills, keeping up signal communication with the ship, and had a fine bird's eye view of his fleet from about 1,400 feet up. I saw him detach a cruiser towards the harbour, evidently to find out if it was clear before he brought his fleet in, and I felt sure that she would have to return before he came in, so I went on to the furthest point occupied by the marines on the other side of the hills, and eventually got back to the ship about half-past two just before he came in. I went on board to pay my official visit as soon as they anchored, and found Prince Henry very delighted at the chance meeting; he at once said, as we should only be one night together, either I must dine with him or he with me. As I had already asked Admiral Acland and some other officers to dinner, I told him he had better dine with me, and his Rear-Admiral too, so that was arranged, and we had a very pleasant evening. . . . The German squadron is evidently very efficient. . . ."

Before the dinner party broke up, the Admiral, at the Prince's request, gave him a copy of the Squadron's

last coaling return, showing the rate at which each ship had coaled. The next morning the German ships commenced coaling, and in due course the Prince sent the Admiral a copy of their results. It showed that the Germans had beaten the British, ship for ship, in every case!

The ships soon afterwards dispersed to their home ports for their periodical summer docking, on the conclusion of which they reassembled at Spithead, in company with a number of others, to celebrate the coronation of King Edward VII. Preparations were continued until two days before the event was to take place, when it was announced that in consequence of His Majesty's illness, the coronation was indefinitely postponed. A few days later the Admiralty directed the fleet at Spithead to proceed to carry out a series of tactical exercises that had been previously arranged. The combined Channel, Home and Cruiser Squadrons, with seven torpedo gunboats and two divisions of destroyers, accordingly put to sea under Wilson's orders on the 2nd of July, and proceeded down Channel in company until off the Bill, when the Home Squadron, under Sir Gerald Noel, proceeded to Portland.

Wilson had despatched in the early morning another division of destroyers under Commander Roger Keyes[1] to proceed to the westward, and make an attack on him during the night, and he now sent out all the cruisers and the other two destroyer divisions to search for him and to act as a screen.

As soon as it was dark, he turned the Battle Squadron to the eastward, extinguished all lights and proceeded slowly up Channel, and so escaped attack, but only just; for Keyes, having avoided discovery by the searching destroyers, got through the cruiser screen, torpedoed the Commodore of the Cruiser Squadron and was close on the heels of the battleships when daylight broke.

On the 7th the Home Squadron rejoined, and the

[1] Now Vice-Admiral Sir Roger Keyes.

whole force was assembled in Torbay. The objects of the exercises were to accustom the two Squadrons (Home and Channel) to work together, to gain practical experience of the difficulties of signalling to and of manœuvring a large fleet, and to enable officers to exchange views on tactics and compare the results of their experience.

Three exercises were planned for the sixteen battleships to act against a skeleton fleet, composed of cruisers in extended order representing an equal number of ships. Each side was to approach the other in line abreast, and when 4,000 yards apart, which was taken as a suitable range to open fire, was to turn in a prescribed way, after which movements and turns might be made at the discretion of the two Commanders. The results were not very satisfactory; on the first occasion a fog bank suddenly descended and enveloped both sides at a critical moment, and in the other two there was a want of reality about the skeleton fleet and about signalling with undamaged appliances which deprived the exercises of any value.

Two other "P.Z." exercises (so-called after the signal used to order their execution), to compare two different methods of working a fleet, were then carried out without other restrictions than that no two opposing ships were to approach each other within 1,600 yards.

Wilson had hoped to spring a surprise on his adversary on one of these occasions by sending destroyers to attack him with torpedoes when a favourable chance occurred during the action, and had practised manœuvring his Squadron with a destroyer stationed on the off-beam of each battleship "as close as was consistent with safety." This was rather indefinite, and the destroyer Commanders naturally put a liberal interpretation on it. The idea was derived from one of the papers that Fisher had issued in the previous autumn, but it proved impracticable, and after a few trials it was abandoned.

A new feature introduced in the course of these exercises that proved to have a far-reaching influence was a system of recording every three minutes the course, speed, and relative position of every ship taking part in the action, so that the respective movements of the two fleets could afterwards be plotted on a large sheet of paper, and their situations, with the movements that led to them, studied at leisure. The credit of this was largely due to Captain H. J. May, the Captain of the Royal Naval College at Greenwich, who was the Admiral's guest for the occasion. The plotting of these details on one sheet of paper was rather a slow process, and the result was often complicated, but improvements were afterwards made, whereby the situation at each three-minute period was drawn on a separate sheet, from which copies were taken, so that a whole set could be issued to each ship the next morning, while the events were still fresh in every one's memory.

During the fortnight that the two fleets remained together, besides the exercises already described, the cruisers were practised in scouting, the destroyers in attacking the Battle Squadrons at sea, and there were the usual boat races and competitive drills in harbour. On the 21st of July the meeting broke up, and Wilson returned with his Squadron to Torbay to coal before proceeding to Spithead to celebrate the coronation ceremonies that had been previously postponed. He had been awarded the honour of Knight Commander of the Bath in the previous June, and on the arrival of His Majesty at Cowes the opportunity was taken to hold an investiture which he was ordered to attend.

"H.M.S. 'MAJESTIC,' CHANNEL SQUADRON,
"*15th August*, 1902.

". . . I got through the ceremony all right to-day with a great many others. Altogether it was a very pleasant gathering, as everyone was more or less connected with the Navy, so that I knew most of them.

We had luncheon on board the *Osborne* on the way across.

"I think everything is now satisfactorily settled for to-morrow and Monday, if only we get fine weather. . . .

"The Prince of Wales told me it was his idea having the investiture on board the Royal yacht, and he was evidently very proud of his invention. It was certainly very appropriate. . . ."

The review of the fleet, which included a Japanese and an Italian Squadron, besides a few other foreign ships, was held on Saturday, the 16th, and was followed in the evening by the usual display of illuminations. It was intended also that on the following Monday His Majesty should proceed in the Royal yacht to the *Nab* lightship, when the whole fleet would again pass in review before him in two columns, which were to exchange positions when opposite him by performing the manœuvre called the "gridiron." What happened is told in the following letter:

"We had a terrible day for our Review on Monday, as well as for our illuminations on Saturday, but everything that was possible to do at all under the conditions went off perfectly. On Saturday I did not encourage any of my own friends to come off for the illuminations, but a good many of the officers had invited friends, and they were caught in a tremendous storm on the way off, more like a West African tornado than an ordinary English thunderstorm. They were terribly wet, but we could not land them again till between 11 and 12. The Italian Admiral had his ship full of ladies all night. On Monday morning it was blowing hard with drizzling rain, and altogether a wretched day for a show. I could not see Cowes, and did not know whether the King would come or not, till a signal was made from the other end of my line that he was close. We just had time to dress ship and salute at the proper time, and as he passed he signalled that he would anchor near the *Warner*, and that the fleet should pass him, but that further manœuvres would be dispensed with. I was a little bit anxious,

on account of the strength of the wind and difficulty of seeing signals, that the fleet might get into some disorder at starting, but everything went perfectly, and I was very proud of my Captains. As we passed the King we were going twelve knots, and as far as I could see back the ships were in perfect station. There was a little clearance in the weather just as we passed him, and the rough water improved the effect. Noel signalled to me, 'It is a pity we cannot carry out the whole programme,' but I was quite content, and I think the King exercised a wise discretion in cutting it short. . . . I hope to leave for the Mediterranean on Thursday evening."

The Channel and Cruiser Squadrons left Portland accordingly, and, having called at Gibraltar to pick up and convoy a destroyer flotilla, reached Malta on the 2nd of September. The Mediterranean Fleet were absent on a cruise, but the *Bulwark* with the Commander-in-Chief, Sir Compton Domvile, had just come in to confer with Sir Arthur on the forthcoming combined manœuvres.

These were the operations of which Sir Arthur had written in his previously quoted letter of the 9th of October that he and Sir John Fisher were agreed should be carried out to determine the most important points in the conduct of future operations in which they were in doubt, but Sir John had now become Second Naval Lord at the Admiralty, and it had fallen to his successor to put into effect the plans which had been arranged. In its main features the scheme bore a fairly close resemblance to the blockade of Santiago de Cuba by the United States during the war with Spain, but there is nothing to show whether this was intentional.

Stated shortly, the two fleets were to spend a fortnight in combined exercises similar to those of the last meeting, after which the whole force was to be divided into three fleets, A, B, and X, each with its proportion of cruisers and destroyers, who were to proceed to different ports and hold themselves in readi-

ness to commence the operations on the order being given. A and B fleets were then to act in concert in blockading X, with the main purpose of gaining information on "what were the risks involved in keeping such a close watch on a fleet in a defended port as to ensure bringing it to action if it escapes."

The Channel and Cruiser Squadrons left Malta on the 8th of September, and after spending the allotted fortnight in company with the Mediterranean Fleet in the neighbourhood of Nauplia, proceeded on the 22nd to Suda Bay and became the B fleet. At the same time the 2nd division of the Mediterranean Fleet, under Captain H.S.H. Prince Louis of Battenberg, who had been given the command rendered vacant by the sudden death of Rear-Admiral Burges Watson, became X fleet, and proceeded to Argostoli, leaving the 1st division under the Commander-in-Chief as A fleet at Nauplia.

The hostilities were ordered to commence at 6 p.m. on the 29th, and at that hour Sir Arthur left Suda Bay with the B fleet, and proceeded to his station off Argostoli. The arrangement made by the two Admirals was that the A fleet was to watch the eastern half of the open sea outside the harbour and the B fleet the western half. At night the two flotillas were to take it in turn to watch close in, and the cruisers were to form on an arc farther out to ensure, as far as possible, that X fleet should not escape without being seen, while the two Battle Squadrons were free to move about in their respective areas as the circumstances might require.

Every day these forces closed in and congregated off the port outside the conventional gun-range, but in full view of the enemy, who was completely out of sight from them behind a point of land. Conferences were held to receive the reports of the previous night's events and to make any fresh dispositions which these experiences dictated; the small cruisers were sent to replenish their bunkers from a collier in the offing,

and the destroyers were coaled from the battleships or sent round to Zante, which the A fleet was using as a base; and then, as the evening approached, the ships would resume their night stations.

In accordance with the principle that he had enunciated that evasion was the best means of avoiding torpedo attack, Sir Arthur formed his Battle Squadron every night in close order, with the columns two cables apart, and extinguished all lights. At a given time, but without signal, the ships would increase speed from six knots to twelve, turn 16 points outward in succession and reduce speed again, when the second division would close in gradually to its proper distance. The Squadron thus occupied the least possible space, but the ships masked each other's fire, and the changes of speed and course were not free from risk. The best that can be said of it is that it was an experiment.

On the fifth night the X fleet put to sea and steered to the westward. It was seen by the B cruisers, but by a mistake of one of the cruiser Captains the Admiral did not receive the news till the next morning, when it had too long a start to be overtaken before it reached Palmas Bay; there was, however, the chance of one or more of the ships breaking down, so the whole fleet started in chase, but it was too late. The enemy reached his base safely, and on his arrival there the operations came to an end.

Their duration had been short, but long enough to teach what he had described in his former despatch as a "valuable experience for all classes of officers engaged in carrying them out." He had proclaimed his intention of conducting them as in real war, and he had done so; not by promulgating war routines and instructions for observance on board the ships, but by keeping the ships cleared for action, putting out all lights at night, and imposing such restrictions as he thought necessary, and leaving people to settle down to these conditions as best they could. Fine weather and smooth water had rendered many things

tolerable and possible which otherwise could not have been attempted, but it may be doubted if even his iron constitution would have withstood the physical strain he imposed on himself much longer. He was up and about at all times, getting but a snatch of sleep now and then at night in his small shelter on the after-bridge and taking no rest during the day. He was tired and worn at the end, but he showed no sign of irritation until the *Majestic's* speed was reduced by one of her boilers giving out in the course of the chase. After a few days at Palmas Bay the meeting broke up, and the Channel Squadron proceeded to Gibraltar.

The opportunity of a fine climate and freedom from other pursuits was now taken to complete the gunnery practices of the year, and for the next three weeks the ships were engaged in carrying out their prize firings off Tetuan, going out for four or five days at a time independently. Battle practice at long range had just been instituted as an annual exercise, and as soon as the prize-firing was completed the whole Squadron was taken to sea to carry it out in company, each ship firing in turn while the others watched her practice.

During one of these visits to Tetuan the Admiral, accompanied by his Staff and two military officers of the garrison, who were his guests, paid a visit to the Moorish Governor of the district. A pony for the Admiral and some mules for the other officers were sent down to the beach, and on these the party, escorted by a few native horsemen, rode up to the town across the waste of sand and scrub of which the country consists.

To continue with Sir Arthur's own account of this visit:

". . . The whole proceeding was very Eastern. The Governor sent down some officers to convoy us up, and then met me with a large cavalcade about a mile outside the town. They looked very picturesque in their turbans and long robes waiting at the foot of the hill leading up to the walls of the town. As we

got nearer the town we met a guard of foot soldiers and a band that marched ahead of us, and the guns near the gateway fired a salute. In the town most of the streets were so narrow that we could only ride in single file. The buildings are curious, but there is nothing beautiful about them. On arrival at the palace we all sat round, and were entertained with some very nasty tea made with mint, any amount of sweetmeats and various decoctions of almonds and pomegranates, while a band, consisting of a fiddle, a mandoline, and a tambourine, sat on the floor and played and sang a monotonous sort of chant the whole time. . . ."

This official visit was returned two days later, when the Governor came off to the ship accompanied by a large retinue, one of whom carried a long Moorish gun, handsomely chased and inlaid with silver, which, as he was about to depart, the Governor presented with becoming ceremony to the Admiral. But the customs of the East held no sway on board a British man-of-war. Having made no present himself, he would accept none, and the offer was curtly declined, much to the disappointment of the Governor.

The firings being over, the Squadron spent a quiet fortnight in harbour, and Sir Arthur went over to Tangier in a small cruiser to pay a short visit to the British Minister. It was an unique instance of his leaving his ship for more than a few hours at a time while his flag was flying, and even so was only a departure from his practice for an official purpose. But he carried this practice out in regard to others as well, for it sometimes happened during a cruise abroad that an officer would apply for a short leave of absence to go home on the ground of family sickness or urgent distress. Any such application was invariably refused, with the remark that the applicant's services could not be spared. It was a hard measure, but all were treated alike, regardless of rank or of the support of their Captains.

On his return from Tangier he had a couple of days' hunting with the Calpe hounds on a horse lent him

by the Governor, Sir George White. He also attended a general meeting of the members of the Mediterranean Club to discuss how the club could be developed and its premises extended, and by his advice and influence proposals were carried which established it on a more satisfactory footing than it had been before. After a farewell dinner-party on the 17th of November to Sir George and Lady White the visit came to an end, and the next morning the Squadron sailed for Lisbon.

It had become rather a rare event in recent years for a British Squadron to visit Lisbon, and as the present occasion was taken as a mark of the restoration of those good feelings which used to prevail between the two countries, the inhabitants, both native and foreign, were all the more hospitable, and got up matches and entertainments to give the Squadron a hearty welcome.

The tide runs strongly in the Tagus, and as attendance at these functions on shore required convenient and frequent communications between the ships and the landing-places, the permission of the Admiral was sought for the ships to use their steamboats for this purpose. It had been from the beginning of his command a standing rule that no ship was to use a steamboat for her ordinary services; it was carried to the extent of almost being a feature of his educational system, and it was maintained now. "No," was the reply; "it will be a useful experience of working pulling boats in a tideway."

The visit was a great success, but an incessant round of official calls and ceremonies left the Admiral no time to himself, and he was not sorry to get to sea again after five days of it.

The Squadron put in to Arosa Bay, and after a short stay sailed for England, where the ships were dispersed to their home ports to give the usual Christmas leave. It reassembled at Berehaven in February, 1903, and on the 18th sailed for a cruise

to Madeira and the coast of Spain. Sir Arthur's period of command was due to expire in April, and the cruise was planned to be of short duration.

The skill with which he had planned and conducted his operations, and the boldness with which he had handled the Squadron, had marked him out conspicuously as an officer for further high command afloat, and when it was learned, on receipt of the first mail from England, that he had been nominated to be the first Commander-in-Chief of the Home Fleet, it was universally felt that no better selection could have been made. This feeling was experienced both in and beyond professional circles, and was well expressed in a leading article in *The Times*, which described him as "intrepid in tactics," "astute and original in strategic enterprise," and "a very type of a fighting Admiral."

The Squadron completed its cruise and returned to Berehaven towards the end of March, whence on the 13th of April the Admiral sailed for Portsmouth in the *Majestic* to transfer the command to Lord Charles Beresford. Before leaving he gave a last dinner-party to the Rear-Admiral and Captains, but no farewell ceremony or greeting was permitted to mark his departure from the Squadron, nor again from the ship at Portsmouth, and as soon as the formalities of the transfer had been completed, he slipped over the side in plain clothes and departed.

CHAPTER IX

COMMANDER-IN-CHIEF: HOME FLEET (1903-1904)

The Vice-Admiral hoisted his flag in the *Revenge* at Portsmouth, on the 21st of May, taking with him his staff from the *Majestic*, and having as his second in command Rear-Admiral E. S. Poë, who was flying his flag in the *Empress of India*. Two days later the *Revenge* sailed for Portland, where the fleet had been ordered to assemble.

The Home Fleet consisted of the four battleships of the *Royal Sovereign* class that had formed the Home Squadron, and four others of older types and five cruisers, which, as Coastguard ships, had been accustomed to spend the greater part of the year at various ports round the coast, and had thus developed the habits and customs of harbour ships; since the fleet had been constituted they had assembled for an occasional short cruise, but under the new organization, they were to remain continuously in company with the flag. The destroyer flotillas at the ports were also placed under the Vice-Admiral's orders, though remaining for administration and training under the Inspecting Captain.

The new arrangement was therefore an expansion of an old organization rather than a new creation, but the new fleet lacked the routine and emulation of a sea-going fleet always kept together, which contribute so much to efficiency and smooth working; many of the ships were past their prime, their machinery was not in the efficient state which follows constant use, and their crews were only partly active service

ratings, being made up to full numbers by classes of Royal Naval Reserve men, embarked for three months' training at sea.

Nearly all these ships were at their home ports refitting, and while waiting for them to complete and join his flag, Sir Arthur occupied himself in devising a heliograph for long-distance signalling at sea. Having mounted a long telescope on a three-legged table, the mirror and directing vane or foresight were clamped on it, so that the black spot on the mirror and the ball of the vane were exactly parallel to the line of sight in the telescope. The second mirror, for use when the sun was behind the operator, was then fixed in front of the other, but on one side of it, and cross wires were fitted to the eye-piece, so that a man sitting on a stool, with his elbows resting on the table, could keep the telescope exactly aligned on a distant ship, in spite of the motion of the ship, while a second man stood beside him and worked the heliograph. As soon as the clamps and fittings had been proved to be satisfactory, they were used as patterns for half a dozen more, which were subsequently issued to certain cruisers in time for use in the next manœuvres.

At the end of a fortnight sufficient ships had assembled to make a start with the sea training, and a three weeks' cruise was commenced to Torbay and the East Coast ports.

Throughout July the fleet was engaged in ceremonies and receptions; first at Dover, to salute the President of the French Republic on his arrival, and again on his departure from a visit to the King; afterwards at Kingstown, to assist in the ceremonies of receiving the King and Queen at Dublin, and, finally, at Queenstown, on the occasion of their departure from Ireland. There were landing parties to line the streets, a review in the Phœnix Park, illuminations and fireworks, presentations and receptions. To a large extent Sir Arthur took the arrangements of all these functions into his own hands, and drew up the orders

for them, while at the same time he was maturing his plans for the manœuvres which were to follow.

Two letters give the Admiral's own account of these events:

"H.M.S. 'Revenge,' Portland.
"*15th July.*

". . . Everything connected with the President's visit went off very pleasantly, and M. Loubet appeared to be a very amiable old gentleman. I had a dinner party for the French officers, and there was any amount of entertainment going on for them on shore. I was lucky in escaping a big dinner in the Town Hall by going up to the State Ball. The latter was so crowded that I never got into the ballroom. It was much pleasanter walking about in the corridors, where I met plenty of people to talk to. We leave for Kingstown to-morrow morning, where I have to arrange matters for the King's reception with the Duke of Connaught. I had a few minutes' talk with him at Dover, which was useful. . . . We have got to join in a review in the Phœnix Park among other things. All this kind of thing very much interferes with real work, but the taxpayer, who pays for the Fleet, likes it. The Channel Squadron are here now for the afternoon, just to give me a chance of discussing manœuvres with Lord Charles, and he and some of my old Channel Fleet Captains dine with me to-night. . . ."

"H.M.S. 'Revenge,'
"*Wednesday.*

". . . We got through our Dublin festivities very pleasantly, and the weather was, on the whole, very kind. . . . The Review was very pretty, and, except for the little contretemps that damaged my Flag-Captain, went perfectly. Even that was amusing, except for the victims. We were all standing at the saluting point, gravely saluting the Queen as she drove up close to us, when one of the horses of the military police behind us suddenly turned round and lashed out with his hind legs into the middle of the Captains. The two Flag-Captains were sent sprawling on the grass, and the rest scattered in all directions. . . . After the Review our men picnicked under the trees, and looked as if they thoroughly enjoyed it. Here the King only stops

one day. I shall have to go to Cork with him, and we are to illuminate and have some fireworks. On Sunday morning I start for Berehaven and the manœuvres begin on the 5th. . . ."

The next letter refers to one of the many reforms and changes in the entry, education, and training of officers and men that had been initiated by Sir John Fisher since he had become the Second Sea Lord, some of which provoked a good deal of controversy, particularly the system of common entry of cadets for the three branches of executive, engineer, and marine officers. As a rule Sir Arthur declined to express any opinion on this subject, contenting himself with saying, "The Navy is strong enough to see that through," but in this letter to Rear-Admiral Durnford, the Fourth Sea Lord, he speaks out strongly on one of these proposals.

"H.M.S. 'REVENGE,
"HOME FLEET, QUEENSTOWN,
"*Monday, 27th July*, 1903.

"DEAR DURNFORD,

"Thank you for letting me see the proposals for the new course of instruction for torpedo and gunnery lieutenants. I cannot conceive how Fisher can advocate such a change. He must remember the conditions when he and I passed for Gunnery lieutenants, when the mathematical course, such as it was, did come after the practical course, and everybody felt that it was entirely out of place. Instead of going to sea with all their drills fresh in their minds, they all felt that they had got quite rusty. As the mathematical course was at the College at Portsmouth, some attempt was made to keep up the drills during the course by having occasional duty days on board the *Excellent*, but with the course at Greenwich that will be impossible. The improvement after the Greenwich course had been instituted and put before the practical course was immense, and it was only after that that the gunnery lieutenants as a body were able to hold their own on scientific committees, etc., with the officers of the Royal Artillery. No officer who is worth anything will go to Greenwich after his practical course unless

he is obliged to do so. He is then longing to get to sea or on the staff of the Gunnery school to let off all the knowledge he has gained. The only men who would wish to go to Greenwich would be the confirmed bookworms, who will never make practical officers, and those who want to marry and elope.

"I presume if the Greenwich course is done away with for G. and T. lieutenants some theoretical instruction will be given in the Gunnery and Torpedo schools, but it is quite certain that they will not get men there to teach it of the stamp of Lambert at Greenwich, nor will it be possible to make the theoretical instruction in the Gunnery schools sufficiently continuous. What is really required is to increase the teaching staff at Greenwich so as to admit of more individual attention and to separate the officers into classes according to their ability.

"I sincerely hope the proposed change will not be made."

The hope was not fulfilled; the letter was duly considered with others, but the scheme was introduced, as proposed by Fisher, in the following December.

It may be thought that holding such strong opinions and such a high position, Sir Arthur would have taken further steps to obtain an acceptance of his views, but this was not his way; he would never interfere in any controversy unless called upon to do so, when he would express his opinion and abide the result.

To return to the narrative of events. On the departure of their Majesties from Queenstown the Home Fleet proceeded to Berehaven to coal and get ready for the manœuvres. The general idea of these was that the Home and Channel Fleets were to leave Berehaven and Madeira simultaneously and try to unite before being caught by the Mediterranean Fleet, which was superior to either alone, but inferior to them united, and which was operating from Lagos. The junction effected, they were then to seek out and bring the Mediterranean Fleet to action, and so regain the command of the sea. Two courses were open: to trust to good scouting and communications, and,

chancing the risk of being defeated singly, to try and effect the junction direct, or to appoint a rendezvous well to the westward out of their opponent's reach and force the ships at high speed for a long run to get there in time. Sir Arthur, as the senior officer, chose the latter plan, in spite of the tax it would impose on his ships; it was the most sure of success, and was such as would be carried out in war.

He left Berehaven at the appointed time and steered for the rendezvous off the Azores, over a thousand miles distant. To get there in time he required to maintain a speed of 13 knots, but the troubles began before the first day was out; one ship after another began to drop astern, reporting hot bearings or other engine defects; a westerly gale with a heavy sea was soon encountered, which washed right over the old *Benbow* and *Sans Pareil* and checked the speed of the fleet, but he held on without reducing a revolution, and on the evening of the third day had the satisfaction of joining forces with Lord Charles Beresford only two hours behind the appointed time. He had run the risk of losing two of his straggling battleships, but the risk was justified by the event, for the next morning they re-joined his flag.

He was now in superior force to his opponent, and desirous of finding him and bringing him to action. The Battle Fleet was therefore turned to the eastward, in the hope of getting between him and his base, and the cruisers spread in all likely directions to look for him, but the night passed without any news being obtained. Communication by wireless signalling was far from being reliable, operators were inexperienced, interference was common, and the messages received were often unintelligible; but the next morning one of these mutilated signals contained for certain the word "battleships," and in the absence of anything more definite, Sir Arthur turned and steered towards the place where the cruiser which sent the message was working. It proved to be a good clue. In a few hours he was being informed of his opponent's movements

by a cruiser using the new heliograph, and after a long chase, an action ensued, which, however, was eventually declared by the Umpire to be indecisive.

The strategical operations having thus terminated, the fleets proceeded independently to Lagos, for a series of minor exercises, and on their conclusion, Sir Arthur sailed with his own and the Channel Fleet for Lisbon, to present an address to the King, and to thank him for the facilities and use of his ports which his Government had afforded to our Navy. The address was presented at a great gathering of Portuguese ministers and officials at Penas, the royal residence near Cintra, the Admiral being accompanied by the flag officers and Captains, and the ceremony being followed by a banquet. Two days later their Majesties and a numerous retinue were entertained to luncheon on board the *Revenge*, and an hour after their departure for the shore, the fleet was under way and steaming out of the river.

The Home Fleet reached Portland on the 2nd of September, and after coaling and giving a few days' leave to the ships' companies, commenced a six weeks' cruise on the West coast of Scotland. There is no country in the world more hospitable to the Navy than Scotland, and this is shown at its best in the autumn. Invitations to shoot, fish, and dance came off to the ships at every place, where there was anyone to offer it, as soon as they had anchored, and as the Chief joined in these sports with as much enthusiasm as anyone and always gave the time for others to do so too, it was a very pleasant experience. "If I had arranged it for a pleasure trip it could hardly have been better," is what he wrote, and "We have got through a lot of useful work too." Every chance at sea was taken for one exercise or another, gunnery occupying the greater part of the time. Target practice was generally carried out at towed targets, while the ships continued on their course towards their destination, so as not to lose time; but these towed targets were an endless source of trouble, as they frequently

capsized, despite the precautions taken to prevent this happening. It was exasperating to those who were thus deprived of anything to shoot at, but the Admiral, on being asked once to take some notice of a particular delinquent, replied with the story of the parson in the Western States, who put up a notice to a congregation, in the habit of bringing their revolvers with them to church, "Don't shoot the organist, he is doing his best."

One night, off the Butt of Lewis, he ordered the targets to be dropped free—that is, without any moorings and free to drift with wind or tide—and then manœuvred the Squadron together so that the ships could fire at them simultaneously. The practice was soon over, but the targets had become scattered; they were light flimsy rafts of no great value nor any danger to navigation, but he ordered them to be picked up and kept all his Captains on deck till after midnight, searching for them, before he would re-form the Squadron.

With the demand for a higher standard of gunnery came the need for a better pattern of target for prize firing, and as an order had been received from the Admiralty for a trial to be made of a new one, designed to carry a large sail, on return of the fleet to Portland, a ship was told off to make it.

Early on a cold November morning, a small working party was sent out to moor this target in Weymouth Bay and have it ready for a ship to shoot at that forenoon. It was blowing fresh from the east, and there was enough sea running to make it lively work in the boats and on the raft, so that it was well on in the forenoon before the raft was moored. In the meantime the Admiral had come out in the firing ship, and was now lying close by, watching the men at work, up to their knees in water and drenched with spray, trying to hoist the sail. After two hours' ineffectual struggling to get it properly set, it being long after noon, the officer in charge asked if he might stop to give his men their dinners.

"Not approved," came the reply. A few minutes later he tried again. "Submitted, the men have had no breakfast."

"They should have had it before they left," was the answer. "You must get that sail set."

Eventually they got it set, though it was almost unmanageable in the strong wind with only a single halliard to hoist it, but on the first run past it the ship shot away the halliard on one side, and the target party had to begin again. The chance was seized to pass some food into the steamboat when she went alongside the ship to coal, but the party were kept at their task till dusk, when the Admiral gave it up and returned to harbour.

These incidents will suffice to illustrate the aptness of that name by which he had long been familiarly known to the men. They called him "'Ard 'Eart."

He was steadily working the ships up to the standard he desired, and on returning from Spithead, whither he had been to salute the King and Queen of Italy on the occasion of their visiting this country, he took the fleet through the entrance between the breakwaters and moored it in Portland Harbour in its proper position on a dark night with no moon "as an exercise in entering harbour at night." The next fortnight was spent in completing the prize firings and the long-range target practices, and on the 5th of December the ships were dispersed to their home ports to give leave to their crews.

While at Spithead the Admiral had taken an opportunity to go over the new Submarine School at Portsmouth, and afterwards to go out with Captain Bacon, who was in charge of it, in the gunboat *Hazard* to St. Helen's Roads, to witness a demonstration by the submarines of the invisibility of their movements, and of the tactics they practised in attacking a ship. The conditions were necessarily very much restricted as it was all very novel, and no actual attack was made, but the successful way the boats were handled showed

that more extensive operations to test their capabilities might be safely carried out. The Admiral took a little time to think over what form these operations should take, and on the 29th of December wrote to the Admiralty to propose—

". . . a commencement being made in the work for which these vessels were originally purchased—namely, the investigation of the best methods of destroying them or of frustrating their attacks.

"I would suggest that immediately on return of the Home Fleet from the coast of Spain, Captain Bacon should be directed to endeavour to prevent the Home Fleet, or any part of it, from entering Spithead from the eastward, or from keeping so close a watch on the entrance as to prevent vessels from leaving without being seen. . . ."

Having thus initiated a plan of campaign, Sir Arthur reassembled his fleet at Portland, and on the 8th of January, 1904, sailed for the coast of Spain, to continue his routine of drills and exercises. There was some rough shooting to be had at Arosa Bay, principally snipe and duck, and on Saturdays, when the week's work was over, he would take a small party in his barge up the river, or to some distant marsh, where, in spite of his years, he would hold his own with his guests in tramping through the mud and contributing to the bag.

After a short visit to Marin, the fleet spent ten days at Vigo, and on the 15th of February sailed for Portland, where it arrived on the 20th. Arrangements had been previously made for an attack to be made on the fleet by a flotilla of destroyers as it passed at night between the Lizard and the Start, and on the night of the 18th it was carried out. It was on this occasion that the Admiral first adopted an open formation in which to evade attack instead of the close one he had used at Argostoli. He formed the fleet in three columns and spread these 4 miles apart.

Before leaving Spain, Sir Arthur had received notice that the Admiralty approved of his proposals for testing the capabilities of the submarines to prevent

the Home Fleet entering or blockading Spithead. For this purpose he was directed to confer with Sir John Fisher, the Commander-in-Chief at Portsmouth, and to draw up, in agreement with him, a programme of the operations with the necessary provisions to ensure the safety of the boats. In anticipation of this approval he had discussed the matter with his Captains at a meeting on board the *Revenge* at Arosa Bay, and had asked them for suggestions. His own idea, he explained, was to devise a suitable form of light floating net, which, if laid across channels or in waters the submarines were expected to frequent, would indicate their positions and movements, when they could be followed and destroyed by bombs or depth charges. This idea was taken up at once, and while the Admiral and his coxswain were busy making a net of his own design, each ship set to work independently to produce an efficient net, or some other weapon to be used in conjunction with it. The nets were made of plaited log lines and window sash cord, and after a few trials a pattern was selected and orders sent home for a supply of the materials to make a number of them.

It was first decided by the two Commanders-in-Chief, that a preliminary reconnaissance outside Spithead should be made by the fleet, and its accompanying flotilla of destroyers, before active measures were begun on either side, to accustom officers and men to what they had to expect and look out for, and on the 23rd this was done, each division being sent to cruise near the Nab Light, to see what it could of the submarines, and to show itself to them. The next fortnight was then spent in completing the details of the programme and in preparing the gear and practising its use. This consisted of four different implements, which were :

First, an 18¼ lb. tin of guncotton fitted on a noose, which was to be put over a periscope with a staff or boathook from a boat, and the charge fired with a Bickford's fuse.

Secondly, a towing charge of the same size with a grapnel 12 feet in front of it to catch any projection on the boat, and to be fired electrically.

Thirdly, an indicating net 120 fathoms long and 6 fathoms deep, with meshes 12 feet square, the bottom line being weighted with 2 ounces of lead at intervals, and the surface line floated with cork and kept extended by osiers tied on it, the whole being reeled up on a drum for convenience in laying out. At one end of the net was a buoy, so made that, when towed through the water, a small red flag stood up on a staff.

Lastly, a lasso net, 8 fathoms long by 6 deep, with 18¼ lb. tin of guncotton attached to it 12 feet below the surface, the wire from the charge being led round the net to form a running eye. This was to be dropped in advance of a submarine whose course was shown by an indicating net, and when caught, rounded up close and exploded electrically.

The operations began on the morning of the 8th of March, when the Admiral, accompanied by three other ships and a destroyer flotilla, arrived off the Isle of Wight. After stopping to hoist out the picket boats, the ships advanced towards the Nab Lightship to look into Spithead, with a guard of destroyers and boats on either side, and then spent the remainder of the day in cruising about the entrance until it was time to return to Portland. Except for a few intermissions, this procedure was followed every day for the next ten days. Each night a detachment of ships and destroyers were despatched from Portland in time to arrive off the entrance to the channel at dawn, with instructions to cruise about and occasionally approach the Nab, and to return to Portland in the evening. On the 18th, owing to the loss of Submarine A1, accidentally rammed and sunk by a mail steamer, the operations were brought abruptly to an end.

The submarines had been subjected to a severe ordeal, for there were only five of them, and they had

all been out for eight days out of the ten, but they had come through it admirably, and had "bagged" a battleship on the second day of the operations. Further claims were made by both sides and allowed by the umpires, but there is no need to state them here. The real lessons taught were that their "presence exercised an extraordinary restraining influence on the operations of the Home Fleet," and, on the other hand, "officers and men were infinitely better prepared to make a just estimate of the way of dealing with submarines than they were before." As regards the implements which had been devised for use against them, the use of picket boats with "hand charges" was abandoned very quickly; the indicating nets were tried frequently, but no boat was ever caught in one, nor in a lasso net either; the towing charge was serviceable, and the "great value of the destroyers as a guard to a fleet" was clearly shown.

The above quotations have been taken from the official reports, in concluding which Sir Arthur stated:

". . . As the next step, I should suggest the appointment of a small committee, working in conjunction with the *Vernon* and with one or two destroyers and submarines at their disposal, to follow up the question and work out the best means of destroying submarines under all circumstances . . ."

For some reason, which is not now apparent, this suggestion was not accepted. No action was taken, and the issues remained in obscurity until its urgent necessity was forced upon us in the Great War, when, in a letter to the editor of these pages, dated the 14th of February, 1915, Sir Arthur wrote:

". . . The Admiralty are taking up the question of drifting nets and other devices seriously, much on the lines of what we did outside Spithead in 1904, only with wire instead of window blind cord. I always regret that I allowed the sinking of A1 to frighten me off continuing those experiments. . . ."

After a visit to St. Mary's, in the Scilly Isles, the fleet began to disperse, to disembark the detachments of Coastguard and Reserve men who had completed their course of training, and embark any others who presented themselves for the next course. The number of these was rapidly dwindling, but as approval was given for the vacancies to be filled by active service ratings from the depots, the status of the ships, as regards crews, was nearly the same as that of others in the Channel Squadron. The time was now due for the annual refit, other changes were about to be effected in the composition of the fleet, and on the arrival of the *Revenge* at Portsmouth on the 5th of April, the Admiral struck his flag and proceeded on leave.

An official announcement had been made in February that "the Home Fleet will shortly be composed of four ships of the *Royal Sovereign* class, and of a faster division, consisting of two ships of the *Duncan* class, and of the two ships recently purchased (*Triumph* and *Swiftsure*)." . . . Also that "the Commander-in-Chief of the Home Fleet has been given complete and continuous command of the Home destroyer flotillas." . . .

These changes were now carried out, and on the 13th of June the Admiral rehoisted his flag on board the *Exmouth* at Portland. Rear-Admiral C. J. Barlow succeeded Rear-Admiral Poë as Second in Command, flying his flag in the *Royal Oak*. The *Russell*, *Triumph*, and *Swiftsure* replaced the *Hood*, *Benbow*, and *Sans Pareil*, and the two new cruisers, *Essex* and *Bedford*, relieved the *Edgar* and *Hawke*.

The chronicle of movements and events may now be passed over till October. It is a record of drills, gunnery, and torpedo practices, competitions, coalings, speed trials, tactics and combined exercises with the Channel Squadron, boat races and other sports which constitute the normal occupations of a fleet in frequently changing conditions of place and weather.

On the 15th of September the Battle Squadron, accompanied by such of the cruisers as could be spared from the many other services they were called upon to do, started from Portland on a cruise round Scotland, and on the 24th of October was lying at Cromarty, preparing for its annual regatta, when news was received that the Russian Baltic Fleet had fired on the fishing-boats off the Dogger Bank, wounding and killing some of the crews, and passing on without stopping to render assistance to them. The news was meagre at first, but as further details dribbled in, and the nature and extent of the outrage became known, the public feeling and indignation were very much excited throughout the country.

Sir Arthur was in unusually high spirits at the prospect of such active service as this event seemed likely to require, and on receipt of a warning telegram from the Admiralty directing him to take certain precautions the next afternoon, he saluted his Flag Captain with a slap on the back, much to the amusement of a party of guests who had come off from the shore to watch the regatta, exclaiming, "This looks like business; be ready to leave to-night at ten." And on being asked about continuing the races, added, "We will finish them in the dark with the searchlights."

That night the fleet sailed for the Firth of Forth to meet its colliers, but before coaling could be begun further orders were received to proceed to Portland, and on the 28th the Admiral sailed again, taking with him the fast division and the cruisers, and leaving the second division to coal and follow later.

Without mobilizing any vessels from the Reserve, the Admiralty were collecting a considerable force at Portland; by the 8th of November, when the 2nd division of the Channel Squadron arrived from Gibraltar, there were assembled under the orders of the Commander-in-Chief twelve battleships, the six armoured cruisers of the First Cruiser Squadron

under Rear-Admiral Poë, six second-class cruisers, and a flotilla of thirty-one destroyers with their leader, the *Halcyon*, but by this time the acute stage of the crisis was over. The Russian Government had shown a pacificatory disposition, and there was no longer any need for the concentration being maintained, so after the whole fleet had moved up to Spithead to salute the King and Queen of Portugal, on their arrival to visit their Majesties, the various divisions and units of which it was composed dispersed to their respective stations.

A proposal to build and equip a Sailors' Home in Weymouth for the use of the men of the fleet had recently been initiated by the Mayor and Town Clerk with the support of a few other leading members of the Corporation. The want of such an institution had long been felt, and was now being brought more prominently into view by the increased use that the Home Fleet was making of Portland as an anchorage and as a base for its target practices. An offer of a suitable site had been obtained through the generosity of one of the landowners of the town, but the erection of any building that would be adequate to the purpose in view would require a large sum of money, and as the matter was felt to be of more than local importance, the Mayor invited the Commander-in-Chief and the other flag officers in the port to meet him, and a few other gentlemen in favour of the project, to discuss how the necessary funds could be raised. This meeting was held on the 9th of December, and Sir Arthur at once displayed a keen interest in promoting the success of the scheme. Having opened the subscription list with a gift of £100, he sent a letter to the principal newspapers throughout the country, appealing for contributions from the general public, and at the same time, he brought the matter officially to the notice of the Admiralty, with a recommendation that a grant should be made from the Treasury.

An effort was made by a small section of the community, who were by no means without influence in the county, to secure a promise that no beer or spirits should be sold in the intended Home, and as Sir Arthur would not commit himself to any engagement, either for or against the sale of such liquors, their support was lost; nevertheless, a sufficient sum to make a start was raised by the following autumn, and Sir Arthur, having been elected Chairman of the Building Committee, was able to push on the work and, eventually, to carry it to a successful completion before the period of his command expired.

Since its return from Spithead the fleet had been engaged carrying out the annual battle practice. The ships were first given ten days in which to train and test independently their organizations, after which the target was laid out in West Bay and the Admiral embarked in each ship in turn and personally supervised her performance. On its completion, he assembled the gunlayers from all ships on board the flagship, and presented two cups to the winning battleship and cruiser, the *Exmouth* and *Juno*, which he had given to the fleet as challenge trophies.

The title of the Admiral's command was now changed. Under the terms of the Admiralty Memorandum of the 6th of December, 1904, there took place a redistribution of the Navy throughout the world, and the Home Fleet, with an additional division of four battleships, became the Channel Fleet, and as the former name soon came to be applied to a different organization, it will be convenient to close this chapter and open a fresh one under the new title.

CHAPTER X

COMMANDER-IN-CHIEF: CHANNEL FLEET (1905-1907)

The change of designation brought no change in the fleet's routine of cruising, and the first two months of 1905 were spent on the coast of Spain, where, on the 6th of February, it was joined by the new third division from the Mediterranean under Rear-Admiral Poore. A short cruise was made to Lagos in company with the Atlantic Fleet, and on returning to Ireland on the 25th, as the fleet was approaching Berehaven, Sir Arthur received the news of his promotion by a wireless signal from the Rear-Admiral of the cruisers, who had arrived in advance, and on hoisting the colours that morning, he was saluted as Admiral. The purpose of his visit was the selection of sites for a range, and for observation stations where ships could calibrate their heavy guns, and as soon as this was accomplished, he left the fleet in charge of the Second in Command, and on arrival at Portsmouth, struck his flag while the *Exmouth* was undergoing her annual docking and refitting.

On re-hoisting his flag, he took the fleet for a short cruise to Yarmouth, Grimsby, and Queensferry, and after a week at Spithead to receive the King and Queen of Spain, arrived at Portland on the 12th of June. As it had been decided to abandon the practice of this year's manœuvres, the next two months were spent by the fleet in carrying out gunnery practices and in short cruises in the Channel.

The period was one of great political disturbance. Russia had been engaged for over a year in a struggle with Japan, which was taxing her naval and military resources to the utmost, and Germany had seized the

occasion to make a hostile demonstration against France, on the ground of the latter's actions in Morocco. The Kaiser's notorious speech at Tangier in March had been followed by a violent campaign in the Press and an uncompromising assertion of Germany's claims to have a share in the settlement of the affairs in that country, and as the French policy in Morocco was based on a treaty of the previous year with England, we were in danger of being drawn into the quarrel, though Germany carefully refrained from calling our share in the treaty into question. Outwardly the country remained cool, but there existed a small party who thought the moment favourable for crushing Germany's growing sea power by a sudden attack, and it is a fact that Sir Arthur was warned to hold the fleet in readiness to make a descent on the German coast at short notice.

He wrote an emphatic protest against any such action being taken, but otherwise took no notice of it, and nothing more was heard of it.

Arrangements had shortly before been made for an interchange of visits, during the summer, by the British and French fleets as part of the public manifestation of the good understanding which had been established between the two countries. The Atlantic Fleet had been very cordially received at Brest in July, and on the 5th of August Sir Arthur arrived with the Channel Fleet at Cowes in order to give a fitting welcome to the French Northern Squadron on the occasion of its return visit. His Majesty the King came in the same evening on board the Royal yacht, and on the 7th the French Fleet under Admiral Caillard arrived, and anchored abreast of the British Fleet. In the evening there was a banquet at the Royal Yacht Squadron Club and a grand display of fireworks by the Fleet On the 8th His Majesty attended a reception on board the *Jaureguiberry* and the two fleets were illuminated, while the officers of the French ships were entertained at dinner by their opposite numbers in the British

ships. On the following morning, His Majesty reviewed the two fleets by passing up and down the lines on board the Royal yacht, after which the French ships were taken up Portsmouth Harbour and berthed alongside the dockyard for the greater convenience of the Admiral and his officers while they were being entertained in London.

The French Fleet sailed on the 14th, and the next morning Sir Arthur started with his fleet on a long-projected cruise in the North Sea and Baltic. He had first mooted the idea in the previous February, as a cruise of exercise which would afford an experience of strange waters, and this remained its primary object, but, happening as it did just after the festivities at Brest and Portsmouth, an attempt was made in unofficial quarters, on both sides of the North Sea, to represent it as having some political significance. It had no such purpose, and whatever significance came to be attached to it in the popular estimation was due to the spontaneous cordiality of its reception everywhere, and not to any official measures concerted in advance. The fleet with him consisted of ten battleships, four armoured cruisers, three smaller ones, and twelve destroyers, and as there was no harbour on any of the coasts visited capable of holding such a large number of ships, anchorage was always made in the open, only the destroyers being sent into the ports for shelter.

At Ymuiden, a small port on the coast of Holland, the Dutch authorities showed every desire to make the visit an agreeable one. A banquet was given at Scheveningen by the Minister of the Marine to the Commander-in-Chief and a large party of officers, and the same evening the Queen commanded his presence with as many flag officers and their staffs as could be spared, to a dinner at the palace at Het Loo. This was followed the next day by Her Majesty presenting to Sir Arthur the Grand Cross of the Order of the Lion of the Netherlands, the permission of his

Sovereign having, by a gracious forethought on Her Majesty's part, been previously obtained.

These festivities were marred at the end by an unfortunate occurrence to the *Evertsen*, the Dutch ship which had come to receive the fleet. The Admiral and many of the Captains were dining with the Dutch Admiral at Amsterdam, when it came on to blow from the westward and preparations had to be made to go to sea. Sir Arthur's account of the incident, and of the proceedings at Esbjerg, is given in the following extract from one of his private letters:

". . . We got on board about half-past twelve, and found it raining and blowing, and about 2 o'clock I was called and told the Dutch battleship *Evertsen* was dragging and was firing guns and rockets. We could do nothing to help her, and it was too dark to make out clearly what had happened, so until daylight we had an anxious time. At daylight the tugs came out and they managed to get her off, and I understand no harm was done. We left as soon as we had seen her safely into harbour.

"At Esbjerg we had to lie nine miles from the shore, and communication was so difficult that I was at first disposed to decline all entertainments; but the Danes would take no denial, and to overcome my scruples arranged to put up about 250 men on one night and 100 officers the next night. On the last night there was a dinner and a ball to the officers, which I did not go to, having been entertained at dinner on the first night, but I had invited all the chief officials with their wives and daughters to come off to luncheon the next day. In the morning, however, it came on to blow hard from the south-west and we were only just able to get all the officers off before communication became impossible, so my luncheon party never came off.

"In Germany I do not expect our reception will be so cordial, as the newspapers of the two countries have been nagging at each other; but the Admirals and Captains are already invited to dinner by the Chief Magistrate of Swinemünde on the day of arrival, so no doubt we shall receive civility, if not the same cordiality as at other places. . . ."

On leaving Esbjerg, Sir Arthur directed the Cruiser Squadron to part company and return to England. It blew hard for the next two days, and until the fleet had rounded the Skaw, the destroyers had a very lively time in a heavy sea, so much so that, after passing through the Great Belt in daylight, the Admiral anchored the fleet, and having had all their Commanding Officers on board to dinner, gave them a night's rest before going on. A continuance of the bad weather made the navigation difficult, and on arrival off Swinemünde on the 27th of August, it was too thick to see the landmarks, so the fleet had to depend on its dead reckoning for anchoring in its proper place.

A very cordial welcome awaited it. The Naval Authorities provided accommodation for most of the destroyers inside the harbour; Prince Henry sent a Staff officer to attend on the Admiral during his visit, and the Municipality invited him and his officers to a banquet. The next day the High Sea Fleet arrived, having been specially sent there from Kiel to greet the British Fleet, and in the evening the two Commanders-in-Chief, and a large number of officers from the two fleets, attended the banquet at the Kurhaus, where, in proposing a toast, Sir Arthur said:

"I wish that I spoke German in order that as many as possible might hear what I have to say. We all feel and acknowledge most gratefully how extraordinarily friendly the reception accorded us has been. It has long been my wish to bring the Channel Fleet to the Baltic. The more we see our neighbours the better it will be for the understanding between the two nations. I thank you heartily for the reception you have extended to us, and especially His Majesty the Emperor for his kindness in sending his fleet to welcome us. Intercourse between members of the two navies is calculated better than any other means to further the relations between our two great nations. I call upon my British compatriots for a hearty cheer for Swinemünde and the German Fleet."

This short speech struck exactly the right keynote, and there followed a very friendly interchange of hospitalities between the ships of the two fleets, and a series of entertainments on shore for both officers and men.

On the 31st, having despatched the destroyers under Rear-Admiral Winsloe in the *Sapphire*, to visit Flensburg, Sir Arthur sailed with the Battle Fleet for Neufahrwasser, the entrance to the port of Dantzic, where it was received with as hospitable and cordial a welcome as at Swinemünde, both officers and men being invited to a succession of sports, excursions, luncheons, and dinners.

Describing his experiences in a private letter of the 5th of September, Sir Arthur wrote:

". . . We finish our visits to the German ports to-day, and we shall get two days' comparative quiet before plunging into the festivities at Copenhagen. At Swinemünde I got a very nice letter from Prince Henry, regretting that he could not come and meet me. The meeting of the fleets was very cordial. We were all charmed with Admiral von Koester, my opposite number, the Commander-in-Chief. For one day we were kept in doubt as to whether the Emperor would pay us a visit. I don't think he ever contemplated it, but as he was launching a ship at Stettin only two hours away the Germans all expected he would pay us a surprise visit and so kept us on the lookout. I sent him a telegram, saying how much we enjoyed meeting our comrades of the German Navy, and he sent me a very nice reply.

"Dantzic is a much more interesting place, as there are many curious buildings to see, and as it only takes about an hour to get there I was able to see a good deal of it in spite of festivities. I also went by train to a very interesting place, Marienburg Schloss, which was the headquarters of the Teutonic Knights in the fifteenth century, and has now been completely restored so as to look nearly like a new building, but keeping everything exactly as it is supposed it was in the time of the Knights so that you see how they lived. . . ."

The *Sapphire* and flotilla rejoined the Commander-in-Chief at sea, and on the morning of the 8th of September the fleet anchored off Copenhagen. That afternoon, on receiving the flag officers at his palace at Bernsdorff, His Majesty, King Christian, conferred on Sir Arthur the Grand Cross of the Order of the Dannebrog, and the next day paid him a visit on board the *Exmouth*, accompanied by the King of Greece, the Crown Prince, Prince John of Denmark, Prince Charles, and Princess Frederick of Schaumburg-Lippe.

The stay of the fleet was made very pleasant by the attentions and hospitality with which it was received, both officers and men being made to feel themselves at home among a very friendly people, and in a private letter Sir Arthur wrote of it:

". . . Everything went off very pleasantly, but the only time I got to see anything of Copenhagen was Sunday afternoon. All the rest was taken up with entertainments. All the Royal family were very nice to us. The old King had no difficulty in getting up our ladder, and we could not persuade him to sit down all the time he was on board. He wanted to come on board again and lunch with me, but fortunately for me the Empress of Russia was arriving just at the time of my luncheon, and he could not come. As it was I had quite as many Royalties as I could manage, and it was only settled that the Queen would come at ten o'clock the night before. She was in the highest spirits, and appeared to thoroughly enjoy herself. I enclose a photo I took of the party just before they left. . . ."

This luncheon party had been planned for the entertainment of Prince and Princess Charles and the Danish Foreign Minister, but Queen Alexandra having arrived from England the night before, and having expressed her wish to pay the Admiral a visit, was also of the party, with Princess Victoria and Prince Waldemar as well, so that Sir Arthur was rather uncertain as to the arrangement of his table; but on his asking to know Her Majesty's pleasure, she

graciously waived aside all formalities by telling him she was his guest and would sit wherever he pleased.

The fleet left Copenhagen on the 12th for Invergordon, and the cruise in foreign waters came to an end. It had not been devoid of political significance after all, for the Commander-in-Chief and the flag officers had been decorated by the Sovereigns of the two smaller States, Holland and Denmark, and it had provoked an unexpected manifestation of goodwill and friendliness from all classes of people at every port the fleet had visited, which caused the Admiral to write in his official report of his proceedings:

"Throughout our visit to German waters we have received nothing but kindness and hospitality, and I trust that the visit of the fleet may have tended in some degree to improve the relations between the two countries, and this is evidently the wish of all the authorities with whom we came in contact. . . ."

After a heavy coaling at Invergordon, carried out, as usual, through day and night without intermission —a custom that the Admiral had adopted to save time—the cruise was continued to Lerwick, Broadford Bay, in Skye, and Berehaven, where the ships proceeded in turn to carry out the new operation of calibrating their guns. The increased ranges in use at battle practice had shown that sources of error, previously considered negligible, were of serious moment under the altered conditions, and that guns had their individual characteristics and small differences in value which had to be measured in order to ensure their shooting alike; or, in other words, the uniform graduation of sights required modification to suit each gun, and this operation of calibration was to determine the amount. It was only one of the many factors on which hitting the target depended, each of which required a close investigation and frequent experiments to determine the means of correcting or avoiding it. Another development of the

new conditions was the control of fire from aloft, with its consequent need of a means of communication between the control officer and the gunlayers, all of which had to be improvised by the ship's staff out of voice-pipes and telephones borrowed from other fittings, or picked up off a dockyard scrap-heap.

The Admiral thoroughly realized all these difficulties, and in his usual quiet and unostentatious way materially assisted the Captains and officers in their efforts to surmount them. With the capable aid of the gunnery-lieutenant of the *Exmouth*, he drew up and issued, from time to time, short memoranda embodying the results of experience and pointing out sources of error; he instituted a more accurate method of observing and recording each man's personal performance, and established a routine practice of testing and correcting range-finders; frequent opportunities were given at sea for practice in estimating the rate of change of range, and at other times for trying experiments and testing the organization. A keen spirit of emulation existed in the fleet, which he had further stimulated by the presentation of two handsome challenge-cups, and under these fostering influences the standard of shooting was steadily improving.

The fleet moved on to Portland at the end of October, and was about to submit all this training and preparation to the annual crucial test of battle practice, when a gale of wind washed away and wrecked the target. The construction of two new ones, of Sir Arthur's own design, was quickly put in hand by the shipwrights of the fleet, and on the 16th of November the first of these was moored in West Bay ready for use. The fleet was at a disadvantage in the conditions of weather and visibility, which compared unfavourably with those prevailing on foreign stations, but the Admiral allowed no picking of fine days; if the weather permitted men to work on the target, it was good enough for a ship to carry out her practice. The sequence of the ships was settled by

lot, and having drawn one of half a dozen envelopes containing different schemes of approaching the target, he ensured an exact performance of its conditions by stationing the firing ship astern of his flagship and leading her throughout her run.

Several interruptions were caused by bad weather, but by the 29th the practice was completed, and the ships' companies were sent on a week's leave before going abroad for Christmas.

On the 20th of December the fleet sailed for Vigo, whence, after a week's stay, it proceeded to Arosa Bay, where it remained, with short interludes for practice at sea, till the middle of February, when the combination of the Channel, Mediterranean, and Atlantic Fleets for exercises was due to take place.

The first three of these were competitive tests between the three fleets in communicating by wireless and visual signals over long distances, and as a measure of how far wireless signalling had been developed, it will be of interest to relate what happened in the first of them.

In accordance with orders previously issued the three fleets were formed at 9 a.m. on the 15th of February in three long lines, radiating from a central position, which was occupied by Sir Arthur with his own division of battleships. Forty miles from him were three other divisions, each on its respective bearing, and outside these the cruisers were extended 40 miles apart, with another battleship division at the extreme end of the line. The Channel Fleet line was thus 360 miles in length, the Mediterranean 240, and the Atlantic Fleet 320. Messages were then sent every half-hour from the *Exmouth* outwards, and from the outer ships inwards, with the result that out of 12 messages there were only received correctly at the other end within half-an-hour—

Channel Fleet: Outwards, none; inwards, three.
Mediterranean: Outwards, five; inwards, three.
Atlantic: Outwards, one; inwards, none.

It was certainly a disappointing result, but it was a convincing demonstration of the need of a wireless school, where the training of operators and the organization of methods could be properly developed, and to such it immediately led.

The two remaining exercises, which were of a somewhat similar nature, were carried out while the fleet was closing in, and on the 17th the whole fleet anchored off Lagos. It was a more numerous and powerful gathering than had been ever previously assembled there, consisting of 29 battleships, 15 armoured and 4 other cruisers, and 3 new vessels of that long-sought for type called Scouts. There were 9 Admirals' flags flying, of whom 3 were Commanders-in-Chief, and as usual, His Majesty the King of Portugal was present on board his yacht, the *Amelie*.

A rough programme of the forthcoming events and entertainments had been issued in advance, and it is typical of the scale on which things were done that there were 203 boats started in a sailing race. A day was spent by the three Commanders-in-Chief in discussing and coming to an agreement upon certain proposed changes in the tactical signal book, and another at sea, in manœuvring the 29 battleships together as one fleet; but the most interesting event of the meeting was a smart piece of work performed by three cruisers in carrying out the 4th exercise, of which some account must be attempted, as it originated entirely from the dispositions made by Sir Arthur. There was always a competitive element about these exercises, and he sometimes was able to surprise his opponent by using some fresh combination or new device to his own advantage. The present instance was doubly a case in point, for not only did he employ his cruisers in a novel manner, but he secured his wireless signals from interruption or interpretation by the use of a different wave length, a common enough practice since, but then quite a novelty.

The Mediterranean and Atlantic Fleets under Lord

Charles Beresford and Sir William May respectively, were sent to sea with orders to be in certain positions, 220 miles apart, at midnight, when each was to open one of three sealed envelopes containing a different position, distant 50 miles, and be there by 4 a.m., after which they were at liberty to move in any direction to effect a junction before either could be caught by the superior Channel Fleet under Sir Arthur, who, by the rules, was prohibited from leaving the anchorage before a certain hour, or of being within 100 miles of their midnight positions before 4 a.m.

Lord Charles and Sir William had arranged to acquaint each other with their positions by wireless, but their signals miscarried, and as the plans of the Atlantic Fleet became thrown out in consequence, its movements may be disregarded, especially as Sir Arthur had decided to concentrate his attention on Lord Charles' Fleet.

The situation at 4 a.m. may be illustrated by reference to the face of a clock, of which the inner circle marking the hours is of fifty miles radius, and its outer circle marking the minutes of 100 miles. Sir Arthur then knew that Lord Charles was at one of three positions represented by 2, 6, or 10 o'clock, while the latter could be fairly sure that his opponent was on the outer circle in some direction between 20 and 30 minutes. However, by utilizing their superior speed, Sir Arthur had succeeded in placing the three cruisers *Good Hope*, *Hampshire*, and *Roxborough* in a position on the outer circle in the direction of one o'clock, without infringing the rules and without being discovered. The possibility that Lord Charles would break back and try to get behind him was guarded against by other measures, but the probability was that he would steer in some direction between 11 and 12 o'clock, and the three cruisers had been given orders to enter the circle together and to steer certain courses which practically covered the whole of the area lying between 10 and 3 of the clock face. The result was soon evident, for at

7.26 a.m. the signal came through from the *Roxborough* that she had sighted Lord Charles' Fleet. After a long chase and an indecisive action in the twilight, the whole fleet returned to its anchorage.

The question as to how he had worked out the proper courses for the three cruisers to steer was so general, that Sir Arthur decided to explain it in a lecture, to which he invited all the Admirals, Captains, and two officers from each ship. With the aid of a diagram on a blackboard, he proceeded, after a few introductory words, to demonstrate in short, terse sentences, how, by assuming the relative speeds and the range of visibility of the two sides, and applying to them the geometrical principle of similar triangles, the problem could be solved; but the steps of his reasoning were too quick for his audience, and when at the end he asked if anyone wished to ask a question, there was a silence, until Lambton[1] said: "It seems to me, Sir Arthur, you want us all to learn Euclid again." "Certainly you must," was the prompt reply, which was greeted with a shout of laughter.

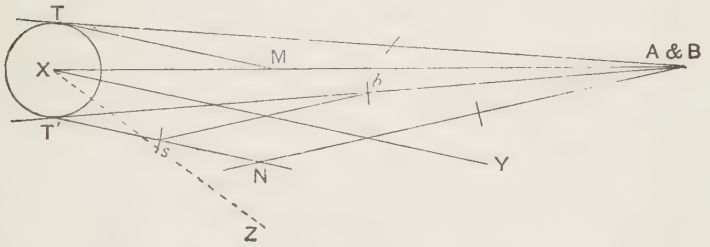
The gathering broke up, and the Admiral, after seeing the flag officers over the side, was returning to his cabin, when he was met by a young Commander who said he had not quite understood what he had said in his lecture. "Come on down below," said the Admiral; "you are the only fellow that has had the courage to say so."

It is not pretended that the following presentation of the problem is an exact description of the way Sir Arthur described it, but it conveys the sense of what he said, and it will at least enable the reader to appreciate the point of the Rear-Admiral's remark.

Let A and B represent two cruisers at a point A, and X a third ship whom they wish to find. A decides to steer directly towards X. Divide the distance AX at the point M, so that $AM : MX$: A's speed : X's speed. Describe a circle round X with the radius of that distance within which X can be clearly seen, and from A draw the

[1] Now Admiral of the Fleet Sir Hedworth Meux.

two tangents AT and AT'. Draw a line through the points T and M Then if X steers a course parallel to TM or one making a smaller angle with XA, he will be sighted by A at M or a little sooner. To find the course B should steer, through the point T' draw $T'N$ parallel to TM. From T' lay off on $T'N$ the distance X will travel in one hour, $T's$, and from s describe the arc of a circle with a radius of the distance that B will travel in one hour, cutting the tangent AT' at b. Join sb and draw a line parallel to it through A, meeting the line $T'N$ at N. Then B steering along the line AN will sight X steering XY at N, for $T'sb$ and $T'AN$ are similar triangles. If a second hourly triangle be described by laying off from A the speed of B along the line AN and from the point so found describing a circle with a radius of $X's$ speed it will give a point in AT as the third point of the triangle. A line drawn through X parallel to the side thus found (called XZ) will indicate the extreme course on which X can be sighted by B steering along AN.



After a fortnight in company the three fleets separated, and on the 5th of March Sir Arthur arrived at Berehaven. Sailing again that night in the *Exmouth*, he reached Portsmouth on the 7th, where he struck his flag and proceeded on leave.

He returned to the fleet on the 2nd of May, and on the 28th sent the ships present to sea in groups of two and three to practise communicating with the shore stations along the coast, and with the flagship, which remained at her moorings at Portland.

One of these groups, composed of the *Duncan* and *Montagu*, was sent to the Bristol Channel, and there, on the morning of the 30th in thick weather, the latter ship went ashore on the Shutter Rock off Lundy Island. On receiving the news a few hours later, the Admiral decided to proceed to the spot in his flagship at once.

When the *Exmouth* arrived off Lundy Island the next morning, the *Duncan*, *Æolus*, *Dido*, three tugs

and some lighters were already there, assisting in the salvage of the guns and stores which was in progress. The *Montagu* was in a very critical situation; she was lying broadside on to and close under the cliffs, exposed to the full force of westerly gales, with rocks ahead of her and a reef projecting seawards about sixty yards astern. The tide ran 4 or 5 knots across this reef, and at springs rose and fell about 26 feet, rising to the level of the upper deck and flooding the ship through the lower compartments, which were in full communication with the sea.

At the Admiral's suggestion the *Ranger*, a specially-fitted vessel belonging to the Liverpool Salvage Association, and commanded by Captain Young, had been despatched to the scene, also an Assistant Constructor, Mr. Mitchell, from the Admiralty, and Mr. Worthington with a party of shipwrights from Pembroke Dockyard, to render assistance. The Admiral took charge of the operations at once; but before he could give his whole attention to them he had to arrange for the conduct of the first period of the Grand Manœuvres, as they were called this year, which were about to begin. He therefore sent for Sir Day Bosanquet, the next senior Admiral, and having transferred his orders and explained his intended operations to him, he set to work to make a more thorough examination of the damage and to form a plan to get the ship afloat.

At first only approximate calculations were possible. The weight of the ship being known, the volume of displacement required to lift her could be ascertained, but only as the examination of the hull proceeded and showed which compartments were watertight, or could be made so, could it be calculated how this buoyancy could be obtained, how it would be distributed, and whether the ship would be in a sufficiently stable condition to be moved without capsizing.

Steps were at once taken to build an airtight deck over the boiler and engine rooms, as low down as the fall of the tide permitted, that is in line with the main

deck, and to install air compressors to force air below it and into such other compartments as were tight enough to hold it, and in the meantime to remove as much weight from the ship as possible. A Reserve battleship was requisitioned to serve as a depot, more shipwrights were sent for, pumps, air-compressors, locomotive boilers and engines were obtained from Pembroke, hoisted in and set up about the upper deck; the special appliances of the *Ranger* and her two consorts were installed, and as each compartment was found serviceable, its small leaks were caulked and its bulkheads strengthened. The 6-inch and smaller guns, their mountings and ammunition, such anchors and cables as could be spared, all accessible stores, coal, and fittings were removed and sent away; but by the middle of June it was evident that these measures would not suffice to provide the required buoyancy, and Sir Arthur decided to take off a number of the armour plates and to secure in their place watertight steel tanks called camels.

The ship was visited by the Controller and by one or two experts in marine salvage, who while wishing everyone good luck, were manifestly dubious of any successful result, but the Admiral remained undaunted and inspired all with something of his own confidence. Differences of opinion arose occasionally as to particular measures, but the masterful chief was inflexible and allowed no obstacle he could control to interfere with his plans. He was indefatigable, spending every day on board the wreck, personally examining the progress of the work below, receiving the reports of the divers and of the officers in charge of the different sections, estimating their results, conferring with the experts, planning fresh details of the pumping and draining, always accessible for consultation and giving his decisions coolly and clearly, and in the evening, after return to his ship, checking over his calculations and dealing with the correspondence of the fleet.

All this work was carried out under very difficult

conditions. Occasionally it was stopped entirely by the ships having to seek a more sheltered anchorage under the lee of the island; every tide the ship filled up with water which had to run or be pumped out again as the tide fell; there was no light below the upper deck, and everything was covered with an oily slime which made progress through the struts and shores and past the open hatchways a matter requiring much caution, even to those well acquainted with the gangways.

A detailed survey was made of the adjacent waters, and anchors were laid out for hauling the ship out into deep water, where she could be taken in tow by one of the battleships present, and transported round to the east side of the island to be beached and made seaworthy for the passage to a dockyard. Spring tides were due to occur on 7th-8th of July, and it was hoped that the work would then be advanced enough to make an attempt; but in the meanwhile the second period of the Manœuvres was approaching, and Sir Arthur's presence was required elsewhere. He, therefore, placed the Senior Officer in charge of the work, and on the 15th of June proceeded to join the fleet at Falmouth.

The Grand Manœuvres, as their name indicated, had been planned on an unusually extensive scale to represent the attack of British commerce in the North-East Atlantic by the Atlantic Fleet, and its defence by the combined Channel and Mediterranean Fleets. Sir Arthur had already prepared his plans, but much remained to be done, and with a rare power of concentration he put aside all thoughts of the *Montagu*, and set to work to complete the details. He was his own staff officer, and measured all his distances and wrote out his orders himself, but by the end of a week it was finished, and while the main body of the fleet proceeded to Milford Haven, he went back to Lundy Island to inspect the progress of the work on the wreck.

The Manœuvres came to an end while the fleets were still at sea, so he left the ships to return to their ports independently while he went back to resume operations on the wreck, arriving there on the 3rd of July.

Every effort had been made in his absence to get the ship ready for floating off on the spring tides of the 7th, but as the preparations were still incomplete, the attempt was not made. Many defects had come to light; a better supply of fresh water was needed for the boilers, and these had to be moved to new places higher up out of the reach of the tide; the air pressure could not be maintained, and the water could not be prevented from rising with the tide in fore turret. Remedies were found for all these ills, except the latter; there was not time to build a floor across the bottom, and no device could be discovered for making it tight.

The loss of buoyancy from this cause was a serious factor, but everything else being in readiness, the attempt to float the ship was made on the morning of the 22nd, when the spring tides were at their maximum. The pumps and air-compressors were started in good time, the outlying ships moved into their stations for hauling the ship off, and for a time everything went according to the plan, but with the rising tide, a swell set in which caused the ship to bump heavily on the rocks, and it was a question how long the repairs would stand the shaking. At 4 a.m., when the tide was at its highest, she was still not high enough to be pulled clear, and after waiting another anxious quarter of an hour, the Admiral decided to give up the attempt, and sent orders to stop the pumps and let the ship fill up again as quickly as possible.

The next fortnight was spent in preparing for a further attempt. It was a heroic effort. There were still 12 camels unused, and as many of these were put in place as could be properly secured; blocks of cork, firewood, and empty oil drums were packed into all the small spaces that could be reached until, on the

1st of August, all work was interrupted by the ships having to seek shelter on the lee side of the island, and they were still there on the 4th when Sir Arthur was informed by the Admiralty that the attempt at the next spring tides must be the final one. As the preparations could not be completed in time, he decided to give it up and to remove the plant.

The enterprise had failed, and this summary account of it may now be concluded in the final words of the Admiral's report:

"Although the attempts to float the ship were unsuccessful, the experience gained must have been of immense value to all concerned, and the lessons in resourcefulness and in perseverance under difficulties were invaluable as a training for war."

An unusual spell of fine weather favoured the work of dismantling and hoisting out the gear, and on the 10th of August the ships departed for their home ports, leaving the *Ranger* to salve the 12-inch guns and other valuable material from the wreck.

The comprehensive scale on which the second phase of the Grand Manœuvres had been framed, has already been mentioned, but though they happened in the midst of such preoccupations as have just been described, Sir Arthur had laid his plans so completely and so well as to obtain a striking success. A full account of the complicated movements of the various forces has been published officially, and it will be sufficient to say that, having broken up his opponent's dispositions off the coast of Portugal, and got between the two principal portions of his fleet, he chased his Battle Squadron for 500 miles at full speed with a portion of his own force, after directing the remainder to form a cordon round the area where the rest of the "enemy," consisting of cruisers, was working, with the result that they were all captured.

On his return to the island on the 3rd of July, he wrote:

". . . We have got through the manœuvres very satisfactorily, and now I am on my way back to try and get her off . . . I feel now that I can unscrew my manœuvre head and put on the *Montagu* head, which is a comfort, as both at once was rather a trial. There is still to me the formidable part of drawing up the report remaining, but that must wait. The manœuvres have been in many ways a new experience, as wireless telegraphy has given me the power of controlling ships all over the Atlantic in a way that has never been possible before, and it has worked much better than I expected it would. It is rather like playing chess on a board as big as from Gibraltar to England. . . ."

On the arrival of the ships that had been engaged in the salvage operations, at their ports, the officers and men were given ten days' leave, and the Admiral struck his flag till the 4th of September. The routine work of the fleet had been a good deal interrupted by the foregoing events, and as there was now some leeway to be made up in gunnery practices, it remained at Portland till the middle of October to carry them out, instead of going on the customary autumn cruise.

At the end of this month, while lying at Berehaven, Rear-Admiral Groome, who was about to complete his service as Rear-Admiral of the Fleet, offered a silver cup to be competed for by the Flag Officers and Captains sailing their own galleys. The Commander-in-Chief and nearly all the Admirals and Captains entered their boats, and at the appointed time about twenty started. There was a strong breeze blowing from the West, and by the end of the first round this number had been reduced by one or two having capsized and other mishaps, but, in the meantime, the lee-mark buoy broke adrift from its moorings and drifted away towards the entrance to the Haven. Most of the boats gave up the race, but Sir Arthur and four others chased the buoy and rounded it before it could be recovered and replaced by the steamboat sent in pursuit. They had a long and arduous beat to

windward back to the fleet, in the course of which the Admiral slowly worked up to the leading place, and he was approaching the next mark buoy, when Captain Fitzherbert in the second boat, about 200 yards behind him, capsized. Sir Arthur at once put his helm up and ran back to render him assistance, but as this was speedily forthcoming from the neighbouring ships, he was soon able to haul to the wind again and continue the race, but not before Captain Lowry had passed him and gained a short lead. The two boats passed the second buoy and approached the third without either gaining on the other; the excitement of the onlookers was becoming tense; then, as the two boats put their helms up and wore on to the other tack for the run to the finishing line, the Admiral's well-trained crew were seen to dip their sails and bear out their outriggers without a fault. He caught his opponent and crossed the line a few seconds ahead of him. While these events were passing, the *Exmouth's* ship's company had gradually assembled on the forecastle and shelter deck, and as the Admiral came alongside, they spontaneously burst into a cheer. It was a lapse from discipline that he would not permit, and immediately he reached the quarter-deck, he gave orders to sound the "still" bugle and hurried down to his cabin.

After a cruise round Ireland, the fleet returned to Portland to give the ships' companies a few days' leave, and on the 12th of December, for the first time for several years, the fleet proceeded abroad before Christmas.

It was Sir Arthur's last cruise in command, and after a ten days' visit to Vigo, he spent nearly all the remainder of it at Arosa Bay. About once a fortnight, he used to take the fleet to sea for a couple of days at a time, and on one of these occasions he introduced, as an experimental novelty, the signalling of orders for manœuvring the fleet by short-distance wireless telegraphy; but the principal occupations were the annual inspection of the ships, prepared for battle, and the performance of routine drills.

General drills in harbour were always carried out competitively, and had reached a stage comparable to that of former days of masts and sails. It was not uncommon for a battleship to "clear for action" in under a minute. Such a performance bore about as much relation to active service conditions as shifting topsails in Malta harbour to shifting them in a gale of wind at sea; but the fleet without competitive drills would be like a school without games, and unless foul weather forbade it, there was a race or competition of some kind on every working day of the week. It was an old-fashioned routine, but at least it provided capital opportunities for testing the organization of a ship's company, and created a spirit of emulation which greatly helped to ease the irksomeness of long confinement in a ship.

The customary meeting of the three fleets, at Lagos, took place in February, and on the last evening, the Admiral and the officers of his flagship gave a farewell "At Home" to the other flag officers and their staffs and to the Captains and officers of all the ships present. On the 22nd the Channel Fleet sailed for Weymouth.

As the final act of his command, Sir Arthur had engaged to attend the ceremony of opening the new Sailors' Home, in the building of which he had taken such a prominent part. Lord Tweedmouth, the First Lord of the Admiralty, had accepted an invitation to perform the ceremony, and on the 28th arrived accompanied by the Controller on board the *Enchantress*. Weymouth was *en fête* for the occasion. Seamen and marines lined the route of the procession from the pier to the Home, guards of honour and bands were paraded, the Mayor and Aldermen were present in their bright coloured civic robes, and the sun shone brightly on it all. After an inspection of the building by the First Lord and his party, Sir Arthur concluded a speech, describing its origin and history, with a request to the Mayor to present the deed of gift to the

First Lord, who having expressed his thanks, read a telegram of congratulation from the King and declared the Home open.

At the banquet which followed, each speaker worked round gradually to the loss they were about to sustain in Sir Arthur's retirement from active service, and when he rose to respond to the toast of his health, he said he hardly knew how to thank them for the cordial way in which they had put, as it were, his name in the forefront of that meeting which was held to celebrate the opening of the Sailors' Home, the thanks for which were due to the successive Mayors and the people of Weymouth. After a few more words about the pleasure it had been to him to assist in its creation and the kind way the fleet had always received him at Weymouth, he struck a more personal note:

". . . He had had during his career in the Service an extremely happy time. It was a Service he loved, and no man could have had what they might call a better innings. He had always had good luck, good appointments, and interesting work. He thought the lines of an Admiral in command of a fleet lay in very pleasant places. He came to the fleet after service at the Admiralty. His recollection of service at the Admiralty was a feeling that one could not move a step without getting seven other people to differ from him, while in the Service there were hundreds of active energetic officers doing their best and ready to help him at the merest sign of a wish. The fact of the matter was that the zeal of the officers in the Service now was so great that an Admiral, if he kept up discipline in his fleet, was surrounded by a body of officers who tried to do their best to keep up the efficiency of the fleet. He was quite sure the sound principle in their Service was to let the young ones come on, and although he went with regret, it was with the feeling that it was absolutely right, and he should regret any attempt to break through so wholesome a rule . . . The progress of the Navy was enduring, and he should look with the greatest interest to the progress of the Channel Fleet under the new command, feeling that his children, as it were, were

scattered throughout the three great fleets that were working in Home waters . . . He thanked them most cordially for the kind way they had drunk his health, and gave him that opportunity of saying 'Good-bye' to the officers who had supported him so loyally."

The command of the fleet was handed over to the senior officer, Sir Reginald Custance, that afternoon, and after a dinner-party on board the *Enchantress*, Sir Arthur sailed in his flagship for Portsmouth, at 11.30 p.m.

On being received by His Majesty in audience before giving up his command, it was a complete surprise to him when the King sat down, signed and handed him his commission as Admiral of the Fleet. He returned to the ship that evening, but it was not until his Staff assembled for dinner that he announced the news. By his permission it was telegraphed at once to the Mediterranean Fleet, which was on its way from Gibraltar to Malta, and, within an hour, a reply was received congratulating him on the honour which had been conferred on him.

He had been awarded the Grand Cross of the Victorian Order in 1905, and that of the Order of the Bath in 1906, and by this last act had received the rare mark of distinction of a special promotion in excess of the usual establishment.

On the day before leaving he bade farewell to the officers and men of his flagship in a short speech, in which he complimented them on the good discipline that had been maintained throughout the commission, and on the high state of efficiency which he had observed in all departments. She had been first in gunnery and sports as well as in good discipline, and in wishing them "Good-bye" he hoped they would maintain this to the end by not cheering him when he left.

His wishes were observed, and on the morning of the 4th of March he went on shore without ceremony of any kind.

CHAPTER XI

FIRST SEA-LORD, ETC. (1907-1911)

Sir Arthur went home to live with his sole surviving sister at Beech Cottage in Swaffham, expecting that his professional career was over, and that he might look forward to a life of leisure on shore. It was a sharp change from his recent activities, and he at once busied himself in altering and adding to his house, and in learning to drive and keep in order a new motor-car, moving with his sister into the neighbouring Manor House, which had been lent him while the alterations were in progress. He also took up golf, and having got a few people to join him in forming a club, laid out a nine-hole course on a piece of rough waste land a short distance outside the town, where he became a diligent student of the game. With golf and lawn-tennis in the summer, and shooting in the autumn, the time passed pleasantly enough, but when in November, 1907, the Admiralty asked him to superintend some experiments with Mr. Pollen's Aim Corrector, an instrument designed to improve the control of fire of a ship's armament, he readily accepted the chance to get in touch with gunnery problems again. The former gunnery lieutenant of the *Exmouth*, Lieutenant F. C. Dreyer, who was associated with him, brought a long and successful experience to bear on the subject, and after the experiments had been continued intermittently for several months, the plotting-table and one or two other devices for the improvement of fire control were adopted as service-fittings in a ship.

In April, 1909, he was invited by the Prime Minister to become a member of the Committee of Imperial

Defence, and in the summer he acted as Chief Umpire of the Naval Manœuvres, so that he remained in fairly close touch with what was going on afloat, and was well acquainted with any important decisions on naval policy.

It was announced in November, 1909, that Sir John Fisher had been created a peer, in recognition of his long and distinguished services, and speculation was rife as to who would succeed him as First Sea Lord on his reaching the age for retirement on the 25th of the following January, when, according to precedent, he would vacate the office. His recent administration had been accompanied by acts which had created feelings of distrust and insecurity amongst officers of high rank, and his conduct of affairs had been so severely criticised by Lord Charles Beresford and others, as to have been made the subject of a Cabinet inquiry. A personal animosity had been engendered between him and his opponents which was fostering an unwholesome spirit of partisanship and exercising a baneful influence on the Service. These circumstances were common knowledge, being even the subject of comment in the newspapers, and the situation was such as to need a strong man, who could be relied on to take a line of his own, to restore harmony amongst these discordant elements.

Beyond giving evidence at the above-mentioned inquiry, Sir Arthur had kept entirely aloof from these controversies, and was, therefore, in an independent position. He had a very high reputation in the country; he was recognized as the most capable sea officer of his time, and the Navy had ample confidence in his firmness and justice, and in his sound and independent judgment—the very qualities in fact which the situation seemed to need; but he was approaching his 68th birthday and, to use his own words, had completely given up all idea of serving again, so that it was doubtful if he would consent to undertake such an onerous task. It seems probable that it was Sir

John Fisher who, with the consent of the First Lord, suggested to the King that he was the fittest man to succeed him if only he could be persuaded to do so. His Majesty met him at Kilverstone, with Sir John, on the 27th of October, and a few days afterwards commanded his attendance at Sandringham on the 6th of November, when he asked him to accept the post. He expressed his reluctance to do so, but His Majesty was quite firm, and in a few minutes the interview was over. It is at least certain that he only accepted it with reluctance, and because there was no other course open to him. He received the formal offer of the appointment from Mr. McKenna on the 20th of November, and on the 2nd December it was announced in the *Gazette*.

It was received with a chorus of satisfaction, and there immediately appeared in the press a number of highly appreciative notices of his services, anecdotes of his career, and articles descriptive of his character and personality, headed, "The Silent Admiral," "Tug Wilson,"* and so forth, which went the round of the world.

He lost no time in picking up the threads of his future duties, for on the day that his appointment was announced, he presented himself at the Admiralty to inquire into the forthcoming estimates, and afterwards commenced a tour of the dockyards and establishments at the ports. He was invited by His Majesty to spend a week at Sandringham after Christmas, when he had a long interview, which he has described in the following letter:

"SANDRINGHAM,
"*27th December*, 1909.

"I have arrived safely, and am now just gone to my room to dress for dinner. On arrival I was first shown to my room, and then shortly afterwards one of the

* The nickname of "Tug," by which he was well known on the lower deck, is said to have been derived from a famous prize-fighter who was celebrated in the latter part of the last century for his tenacity and pluck.

Equerries came and took me down to their room to wait for tea time. Then we went into the hall and soon the Queen and Princess Victoria came in and we had tea. There were no other guests, only the Equerries, Miss Knollys, Lady Knollys and her daughters, to whom the Queen introduced me as cousins. After tea the Queen left, and we retired to the Equerries' room, and soon afterwards the King sent for me, and took me into the ball-room where there was a large Christmas tree lit up with electric lights, and the Prince of Wales' children playing about on the floor. The Queen sat in a corner with a gramophone that was playing all the time, and the King and I sat by ourselves and had a long talk till about half-past six when another guest arrived by train (Sir Everard Hambro, I think his name is), and the King went away to meet him. The children then went home, and shortly afterwards the Queen left and I returned to the Equerries' room which is evidently the refuge. I believe more guests come to-morrow evening, including the Duke of Connaught."

After four days' first-rate sport, shooting over the marshes and in the coverts, the visit came to an end, and on the last day he wrote:

"SANDRINGHAM,
"*31st December*, 1909.

"They had a fancy dress ball here last night for the servants, and after dinner they all came round in procession before the King and Queen. To-night, I believe, all the people about the place collect to receive presents. The King has given me a washing basin and jug which he said he would send to Swaffham."

On the 25th of January, he definitely assumed office, and two days later took up his residence in the official house, 16, Queen Anne's Gate, where, and at the Mall House, into which he moved later, he lived alone, simply and quietly, dining out frequently, and always pleased to see his old friends, but making no attempt to surround himself with his personal belongings and

comforts, nor, except on the rare occasion of a visit by his relatives, any effort to entertain.

Besides Mr. McKenna, the First Lord, his colleagues on the Board were Vice-Admiral Sir Francis Bridgeman, Rear-Admiral Sir John Jellicoe, Captain (afterwards Rear-Admiral) C. E. Madden, and the Civil Lord, Mr. George Lambert. Of these Sir Francis Bridgeman was succeeded on going afloat as Commander-in-Chief of the Home Fleet in January, 1911, by Vice-Admiral Sir George Egerton, and Sir John Jellicoe by Rear-Admiral C. J. Briggs, in December, 1910.

It is not proposed to attempt any detailed account of Sir Arthur's share in the administration of the Navy, for though he left behind him at his death a considerable mass of papers, most of his manuscript notes and memoranda are undated, and untraceable to their originating circumstances without a search through official records which are not yet fully accessible, or without an inside knowledge of the events and discussions in council of the period. In short, the material for such a history is not available, but a few of the papers are sufficiently complete documents to justify their being quoted in support of his opposition to the formation of a Naval War Staff, and one as throwing light on his view of the *rôle* the Navy should play in the event of an European war. They are, therefore, given at the end of this chapter.

He held the post for a period of a little less than two years. On his return from leave on the 21st of October, 1911, he learned that Mr. Winston Churchill was about to succeed Mr. McKenna as First Lord:

"ADMIRALTY ARCH,
"*24th October*, 1911.

. . You will have seen in *The Times* this morning that I am to have a new Chief. It is a great surprise. I was only told of it by Mr. McKenna when I returned to the Admiralty on Saturday, and then it was not allowed to be made public. The change has actually

taken place to-day, so they have lost no time. What the meaning of the change is nobody knows, unless it is the Prime Minister. Mr. McKenna certainly did not want to go. . . ."

There quickly arose a sharp divergence of opinion between the new First Lord and the Naval members of the Board about various changes which he wished to introduce, and notably about the establishment of a Naval War Staff at the Admiralty; and as he failed to obtain any agreement with his views on this subject, he decided to summon a new Board, and announced the fact on the 22nd of November.

This event is described in the following letter from Sir Arthur to his sister:

"Admiralty Arch, the Mall,
"*27th November*, 1911.

When you return from your visit to Aunt Ellen you will find me no longer a Lord of the Admiralty. They have let me off the last three months of my hard labour. On Wednesday last, when I got home after dinner with the Markhams, I found a letter from Mr. Churchill to say he had decided to have a new Board, and Admiral Madden, Sir George Egerton and myself, were to go. The next day it was settled that our places are to be taken on the 5th of December by Sir Francis Bridgeman, Prince Louis of Battenberg, and Captain Pakenham. They are all good men, but whether they will be more amenable than Mr. Churchill has found the present Board, I don't know. Anyhow, I hope we shall make the change without any friction. I shall be very glad to get away, as if I stayed I should have a very anxious time in the next three months. The change is not to be published till Wednesday, but I should not like you to see it in the papers before you heard from me. There will be no harm in your telling your friends in Swaffham to-morrow afternoon. I expect the papers will have a good deal to say about it when they know. . . ."

The new members of the Board took over their duties on the 5th of December as arranged, and on the 13th Sir Arthur returned to Swaffham.

He had admirably carried out the task which he had been asked to undertake. Confidence and harmony had been restored; and though the policy of the previous régime was continued and the organisation and distribution of the Fleet remained unchanged, the heartburnings and strife incident to it ceased at once; and there had been maintained a steady progress of the development of the material and of the training of the personnel of the Fleet.

He had also taken a wide view of our requirements all over the world, and had spent much time in redrafting the War Orders. Many of his arrangements so made were acted on when the war began, and he put in them the plan for using the Downs as an "examination anchorage" for merchant shipping, after obtaining the necessary data by having the Straits watched to see what number of ships passed during a given period. He caused plans to be prepared for a new type of mine-sweeper, and though the building of them was not undertaken, the plans were afterwards used with some modifications for the construction of a numerous class, called sloops, during the war. Want of the necessary funds also excluded another class of ship, which would have proved useful in the war, consisting of large ocean cruisers, with a wide radius of action and carrying an armament of 9·2 guns. Finally, he had settled the question of a coaling station in the South Atlantic by sending a cruiser to examine the anchorage at the Abrolhos Rocks.

He was offered a peerage, but with His Majesty's permission, declined it, and retired to private life again without fresh mark of honour until on the 4th of March, his birthday, he was created by His Majesty a member of the Order of Merit. In June of the same year he received the distinction of D.C.L. from the University of Oxford.

One of the points that Lord Charles Beresford had long been insisting on, and which had been brought

prominently into notice at the above-mentioned inquiry, was the need of a War Staff at the Admiralty. He was backed up by a few brother officers, and by some well-known writers of repute whose knowledge of naval and military history lent weight to their arguments, and within a few days of Sir Arthur's accession to office, there began to appear in *The Times* a series of articles by one of these latter, setting forth very fully the case for the creation of such a body.

Sir Arthur's opinion of this proposal is set forth in the two following rather lengthy papers, from which it will be seen that he pointed out that there was no analogy between the movements of land and sea forces, and that therefore the example of the Army constituted no precedent applicable to the Navy. He also insisted that there already existed a Staff for the Navy, which although it was not known by that name, was a highly-developed organization that amply fulfilled its purpose, and that the grafting of this proposed institution on this organization would only cause difficulties and delays in Admiralty administration without compensating advantage.

These views prevailed as long as Mr. McKenna presided at the Board, and the subject was left in abeyance until Mr. Churchill became First Lord, when it was immediately revived by his summoning a meeting of the Board to discuss it, which was only postponed on Sir Arthur undertaking to state the objections.

The papers he prepared are as follows:

"First Lord,

"The attached paper was partly drawn up for use when the question of a War Staff was previously under discussion. It deals with the question in general terms without reference to the particular proposal that you have brought forward. It need not, I think, be considered confidential and might be printed.

"Your actual proposal only involves the addition of

one officer, styled the Chief of the War Staff, but even that small addition would, I think, be disadvantageous.

"An adviser without responsibility can only produce irritation when his advice does not happen to agree with the opinion of the officer who has the responsibility.

"The officer selected must be senior to both the D.N.I.[1] and the D.N.M.[2] and he would, therefore, lower the status of these and add very much to the difficulty of selecting suitable officers for all three posts.

"Being interposed between the First Sea Lord and the heads of these two departments, he would make it more difficult for the First Sea Lord to communicate freely with them as he does at present, and as it is absolutely necessary he should.

"Still more difficult would it be for his Naval Assistant to communicate directly with them without giving offence to the Chief of the War Staff.

"All papers would be delayed by having to be dealt with by the Chief of the War Staff, as they would still have to be dealt with by the First Sea Lord, or the Member of the Board concerned afterwards for the necessary action.

"Plans for the protection of vulnerable points and plans of fortification of Naval Ports are now dealt with on their Naval side by the D.N.I. as a member of the Home Ports Defence Committee. It is not clear that the Chief of the Staff could do any better.

"The tactical aspects of designs and armaments of ships are now in the province of the D.N.O.[3] The Chief of the Staff could hardly undertake it without the help of the D.N.O.'s staff, and he is not likely to be so well qualified as the D.N.O. The larger questions of ship design are always discussed by all the Naval Members of the Board.

"Manuals of strategy and tactics are either prepared at sea or at the War College, or if prepared elsewhere they are sent to the War College for criticism.

"It has been shown on the paper dealing with the general question that the special selection and training of a body of Staff officers could not be successfully adopted in the Navy.

[1] Director of Naval Intelligence.
[2] Director of Naval Mobilisation.
[3] Director of Naval Ordnance.

"It is quite possible that a new First Sea Lord might require further assistance to help him in thinking out the various problems that he has to deal with, but in that case he would simply ask for an additional Naval Assistant, and select the best man for the special work he required him to do. At present I see no necessity for any addition.

Naval War Staff.

"The agitation for a Naval War Staff is an attempt to adapt to the Navy a system which was primarily designed for an army. There is a very general conception that because a Great General Staff has been found a most successful instrument for the preparation of an army for war, especially in the case of the Great General Staff presided over by Count von Moltke, which gave such extraordinary success to the Prussian Armies in their Austrian and French Wars, that, therefore, a staff on similar lines must be a necessity for the Navy, but the conditions and the problems to be solved are so entirely different that no analogy can be drawn between them.

"The conduct of wars on land depends mainly on the means of transport and the supply of food and ammunition to the Army. Before a General can work out a plan of campaign or select the best line of operations, the Staff must make a most careful study of the topographical features of the country, the adaptation of the available means of transport, whether by railways or by motor cars or other vehicles on ordinary roads, or pack animals across country. They must study bridging streams, the assistance or opposition they may expect from the inhabitants, and a multitude of other details which vary with every campaign, and must give the most careful consideration to the enemy's power of attacking any part of the Army in superior force at any stage of the proceedings, and especially it must consider the means of defending its lines of communications without which the Army cannot exist.

"To determine all these matters even for one campaign requires a very large staff of highly trained officers, and it must be all worked out on paper from information obtained from a multitude of different

sources, as no practical trial can be made of the proposed arrangements in peace time, except to a very limited extent.

"Ships, on the other hand, contain in themselves all that they require for war, including accurate charts of every sea in which they are required to operate, so that they are ready to move anywhere at the speed ordered as soon as they can get steam ready, and up to the limit of their coal capacity; they have no line of communications to defend.

"To realize the difference in this part of the Staff work of the two Services, imagine an order to be given simultaneously at this moment for a Division of the Home Fleet to proceed to the North Sea, and a Division from Aldershot to proceed to the coast of Norfolk, both prepared for instant battle. The first could be carried within the limits of a single short telegram and without any preliminary plans. The second would require the consideration of many more details than anyone not conversant with the difficulties of moving large bodies of troops can think of. The provision and transport of tents, baggage, ammunition, food, horses, guns, the selection of camping grounds, the timing and capacity of trains, facilities for entraining and detraining men, loading and unloading stores, transport by road in various ways, and a hundred other matters, must all be settled by the Staff beforehand, or there would be hopeless confusion and great loss of time, and this even in time of peace in our country. In war in an enemy's country the complications are, of course, infinitely greater.

"In the movements of fleets there is nothing in the least analogous to all this, either in peace or war.

"The requirements of the Navy are quite different. In the aggregate probably more thinking has to be done to produce an efficient Navy than an efficient Army, but it is on entirely different lines. The thinking in the Navy is mainly occupied with producing the most perfect ships, guns, and machinery, with crews trained to make the most perfect use of them, and constantly practised under conditions approaching as nearly as possible to those of war.

"All this requires an enormous thinking department, but the Staff that does this thinking is not called by that name. It is comprised of the principal

members of every department at the Admiralty, supplemented by the Admirals, Captains, Executive Officers, and heads of the different departments in every ship afloat, all organized for one end.

"The Navy has learned by long experience thoroughly to distrust all paper schemes and theories that have not been submitted to the supreme test of trial under practical conditions by the Fleet at sea, and the whole Admiralty has been gradually developed to make the most of the experience so gained.

"The organization of this huge Staff to give every part of it the greatest freedom to think out its work, and at the same time to bring all departments into co-operation, is necessarily a task of great difficulty, and one that requires constant adjustment to meet the changing conditions.

"The process of thinking out a Naval policy may be said to commence with the Intelligence Department, whose business it is to ascertain the strength of any possible enemy in ships, guns, men, training, etc., and the conditions under which they can be used to do us injury.

"These are the data on which our whole policy must be framed. The Navy must be constructed and organized definitely with a view to meeting the actual forces of any combination of nations that is at all probable as they are known to exist now, or as far as they can be foreseen for the future.

"The working out of this problem is spread over every branch of the Admiralty, each of which deals with a part, as well as over the various schools for specialists, and various squadrons and flotillas at sea.

"The results are then brought to a focus, through the heads of the various departments of the Admiralty, to the members of the Board concerned, and in all matters relating to Strategy and Tactics, and the actual use to be made of the Fleet in War, they are still further focussed in the First Sea Lord as the principal adviser in these matters, who has a Naval Assistant, always one of the ablest Captains in the Navy, to assist him.

"The preparation of War plans is a matter that must be dealt with by the First Sea Lord himself, but he has to assist him, besides his Naval Assistant, the Director of Naval Intelligence and the Director of Naval Mobilization, and in the latter's department

there is a war division, consisting of a Captain and a Commander especially allocated to this work. The D.N.I. and D.N.M. with the Assistant Secretary form the War Council from whom the First Sea Lord obtains advice, either by minutes on the papers or by verbal discussion as the occasion requires.

"Another reason why a War Staff which is a necessary feature in Army organization is unsuitable to the Navy is that as it is impossible to produce conditions really resembling war in peace manœuvres on shore, Army policy must be framed principally from the records of past wars and the opinions of officers who have taken part in them, while Naval policy is based almost entirely on experiment and the result of actual practice at sea.

"The fleets, cruiser squadrons, destroyer flotillas, submarines, mine-layers, mine-sweepers, etc., are continually carrying out experiments in tactics, gunnery, torpedo attacks, and all other operations of war under conditions far more closely resembling actual war than is at all possible with Army manœuvres. The difference between the two Services in this respect is enormous.

"When a problem arises in the Army, the only method, in the majority of cases, is to submit it for the opinion of the Staff, because actual experiment is impossible, while in the Navy most problems are solved by actual trial by officers afloat.

"Of course, thinking, and often thinking of a very high order, is required to devise schemes for these experimental investigations and exercises, and for carrying them out; but the thinking is by no means confined to the Admiralty, probably the greater part is done by officers of all ranks serving at sea.

"It is often suggested by advocates for a War Staff, that special officers should be selected and trained for duty on the Staffs of the Admiralty and Admirals at sea.

"Now a Staff in the Naval sense is required by an Admiral to help him to do work that he has not time to do himself, and supply him with expert advice on technical subjects.

"Thus he has in a large Fleet his Chief of the Staff or Captain of the Fleet to arrange the organization, coaling, provisioning, and general duties of the Fleet; a

Commander for gunnery duties, a Flag-Lieutenant for signals, a Lieutenant for wireless, an Engineer-Captain, and sometimes one or two others. These are all available for any General Service duties that may be required in addition to their specialities, but no special Staff course could be made to suit them all.

"The present system by which officers serve for two years in the different departments of the Admiralty, and then go to sea, circulates an immense amount of knowledge throughout the Fleet, and brings fresh sea-going experience to the Admiralty far better than any system of selecting special officers for Staff duties could.

"The Service would have the most supreme contempt for any body of officers who professed to be specially trained to think. There is no service where there is more thinking done, but officers are judged by what they can do when afloat.

"The whole spirit and training of the Navy is to make officers, whatever their position, do their thinking for themselves, and to keep themselves ready to act instantly in all emergencies, and it is necessary that it should be so, because the loss of five minutes in Naval warfare would be generally of more importance than an hour in Land warfare."

The following copy of an undated manuscript in Sir Arthur's handwriting gives an outline of his ideas on the proper employment of the Navy in war. It is manifestly only a partial statement:

"The primary object in a war with a great maritime Power, from a Naval point of view, must be the destruction of her fleet, and Naval opinion on any proposed action by the Army must be mainly determined by the extent to which it helps or hinders that object.

"It is certain that if a British force is landed on French soil to assist the French Army, it cannot be withdrawn without great damage to our pride and national honour, and the tendency will be to make increasing sacrifices in men and material to support it.

"Hence, if a force is once landed on French soil the Navy can expect to get very little, if any, support from

the Army in carrying out its main object, and joint action of any kind against the enemy will become impossible. The Navy will also have the responsibility for preventing raids, and the panics arising therefrom thrown on it in an increasing degree.

"Any failure to deal promptly with a raiding party, however small, that lands on our shores will lead to demands from the public and the press for ships to be attached permanently to the coast, and this could only be done by weakening the watch on the 'enemy.'

"During the progress of a war many places on the coast may acquire an importance quite unforeseen in peace, and will require additional protection. Places where destroyers may find it convenient to anchor while waiting for orders, open ports which it is found advisable to turn into temporary bases, anchorages where merchant ships have taken temporary refuge in consequence of reports, true or false, that an enemy's cruiser is at large, may all require protection. These and many other causes will create demands for troops on the coasts which it is probable there would be great difficulty in meeting with practically the whole Regular Army out of the country.

"Any failure to carry out these services promptly and efficiently would add greatly to the responsibilities of the Navy.

"If the proposed landing of the Expeditionary Force gave any hope of ensuring the final victory to France, and of marching in triumph to Berlin, it might be considered worth while to forgo the co-operation of the Army with the Navy, and to accept the increased responsibility of the latter for the defence of the coast, but even the advocates of the scheme do not pretend that that is the case.

"In estimating the chance of this contingent turning the scale, the Committee should consider not only the smallness of the numbers, but also the disadvantage under which it will labour.

"First, there is the difficulty of co-operating with another Army trained on entirely different lines and speaking another language.

"Second, it will be dependent on French railways for its communications.

"Third, its ammunition and equipment not being interchangeable with the French, it will be entirely

dependent on maintaining its line of communications. If that is cut, it cannot draw supplies from any other line of supply that may be in working order.

"The effect of these disadvantages have, no doubt, been fully considered by the General Staff, who are better qualified than the Admiralty to estimate their importance, but it can hardly be doubted that they must detract appreciably from the value of the contingent.

"The alternative to this scheme is joint action by the Army and Navy with the one main object in view, the destruction of the enemy's fleet, both Naval and Mercantile.

"Schemes of this nature were considered and discarded on the ground that no relief could be given to the Armies of France by any threat by the British Army to make a descent on the coast of Germany, since the latter Power has ample troops, both for watching its own coasts and for an attack on France, and those detailed on the former service would not in any case be used for active operations.

"This statement requires reconsideration. The principal Coast fortifications are manned by the Naval Artillery, and these would, no doubt, be kept fully manned. Other fortifications, such as Borkum, Sylt, the land forts round Wilhelmshaven, Swinemünde, Dantzic, etc., would be manned by Fort Artillery men, but the numbers allotted to them is not known.

"Our information as to the numbers of the field army that would be really kept on a war footing on the coast is very uncertain. There is a vast difference between an army that can be mobilized if required, and one that is actually kept on a war footing and complete in every detail. It is certain that every industry will be suffering from want of men, and it is not likely that they will keep more men mobilized on the coast than appears to be necessary for safety. It would be interesting to know how many men of the 9th Army Corps, for example, which is believed to be allotted to the North Coast, are either employed or in some way connected with the great ship-building firms, and the effect of their absence on these industries.

"If our Army is once committed to action with the French they will know that they have nothing to fear,

and the Coast Army can be used, either as Reserves for the main Army or to return to their occupations as required. To keep these men mobilized would of itself be a blow at the resources of Germany.

"If the Army decides to act with the Navy, one division embarked in the transports, and acting with the Navy, would keep the whole Coast Army whatever its strength on the move, and compel them to keep it fully supplied with transport and stores, and above all with skilled officers who they would very much prefer to employ with the main Army.

"Another great advantage of this plan is that whatever fighting there is will take place on German soil, and bring home to the people some idea of the miseries of war.

"Wilhelmshaven, Bremerhaven, Cuxhaven, and the Kiel Canal can all be threatened by a military force, acting in conjunction with the Navy in a way that could not be ignored by the enemy, since, if not defended by a really efficient and mobile field army in addition to their garrisons, any of them could be captured, and even if no actual success is gained, the mere fact of keeping this field army in motion must tend to exhaust their resources."

CHAPTER XII.

THE WAR—ADMIRALTY—CONCLUSION (1914—1921).

The outbreak of the Great War in 1914 found Sir Arthur living in quiet retirement at Swaffham. Early in July he had been with his brother and sister to Zermatt, to see the grave of their brother William, which had lately been moved from the village churchyard to a new cemetery, but he had returned in time to attend the review of the Fleet by the King at Spithead, on the 18th, and had afterwards spent a few days on board the flagship to witness the manœuvres in the Channel, and meet his old friends, his former Captains, now commanding Squadrons. He was thus with the Fleet almost up to the time when the curtain fell on its movements and completely hid them from the public view and knowledge.

In a letter to the editor of this book, dated the 19th of August, after expressing his surprise that such secrecy had been possible, and admiring the success with which it had been accomplished, he continued:

"I fear you will have a weary time. The open blockade is perhaps sound strategy under the circumstances, as if the French can hold their frontier, and the Russians keep up the pressure on the East, the Germans must be exhausted in time; but if the Germans succeed in entering France, the Navy will have to take a more active line. I am very anxious to hear what success the mine-sweepers have in dealing with real live mines. One can only form a very rough estimate of what the risks really are . . . I cannot get out of my head that Heligoland ought to be taken. It would wipe out a possible base of submarines, and give us a base from which aeroplanes could explore

Wilhelmshaven and the coast as a base for coaling and oiling destroyers. I am convinced that with the high standard of gunnery now in the Fleet it could be done with little loss from gunfire, as the preponderance of fire that could be brought on the top of the island from long range is almost unlimited. Mines and submarine attacks are the main risks to be feared. The risks of the former depend on the success of the minesweepers in sweeping a channel for the fleet to go in by, and the latter, though a very real danger, can be reduced by a screen of destroyers looking out for periscopes with instructions to ram directly they see them, and the ships could have their nets out as soon as they reach their stations for bombardment.

"I cannot tell you what a comfort that few days' cruise I had with the Fleet has been to me. To have seen you all in fighting trim up to the very last has given me no end of confidence."

The more active line that he was thinking that the Navy might have to take was undoubtedly the policy that he had intended to follow when he was First Sea Lord—that is to say, a close blockade of the ports in the Bight, and of the Skagerack, towards which the capture of Heligoland was a very necessary step.

He was made Honorary Colonel of the 2nd Brigade of the Royal Naval Division, on the raising of that force in September, and paid a visit to their camp near Dover, but his thoughts were running on more active matters—he was bringing forward a protective device, called a cow-catcher, to be fitted to the bows of a ship as a protection against mines, was working out the details of his Heligoland project, and occasionally attending a consultation at the Admiralty. On the 29th, he wrote again :

". . . I had a talk with the First Lord and Prince Louis about Heligoland, and gave them my ideas, but I doubt if anything will come of it. It would be no use their undertaking jobs they do not feel confident about. The First Lord was very civil, and told me I could have the run of the War Room if I

liked, but I have not taken advantage of it, as if I was First Sea Lord myself I should hate to have one of my predecessors prying into things. . . ."

The proposed enterprise had already been examined by the Commander-in-Chief and Flag Officers of the Grand Fleet, and Lord Jellicoe has clearly stated the objections to it in his book, "The Grand Fleet 1914-1916"; the First Lord had just returned from a visit to the Grand Fleet, and was well aware that the Commander-in-Chief and Flag Officers were unanimous in their opinion against it; but Sir Arthur was not a man to be lightly turned from any reasoned conviction that he had formed, and he followed up his above-mentioned conversation by submitting his plans for the operation in writing.

When Prince Louis resigned the position of First Sea Lord on the 28th of October, Mr. Churchill invited Lord Fisher to fill the vacancy, and at the same time asked Sir Arthur to come up and assist him. He did so at once, stipulating only that he should give his services without accepting any appointment or pay. It was an anomalous position, for apart from his being a member of the Committee of Imperial Defence, he was without authority or responsibility; but it was no time for nice distinctions; on the one hand he was eager to be of use, and on the other there was a desire to obtain the benefit of his great abilities and wide experience; the ordinary principles of defined duty and position were waived, and the knowledge that he had joined the Naval Administration greatly helped to restore public confidence after the loss of the three cruisers, and to maintain it under the worse shock of Coronel.

He was made a member of the Naval War Staff Group, consisting of the First Lord, the First Sea Lord, the Chief of the Staff, the Secretary, and the Naval Secretary to the First Lord, which was then the sole authority directing Naval affairs, and in this

capacity he revived his project of the seizure of Heligoland, and pushed for its execution by the Channel Fleet. As part of a different strategical conception, this project may have had its merits, but the elaborate plan of carrying it out that he drew up failed to remove any of the objections which had been previously raised, and in common with one or two other proposals of a similar nature, it soon fell into abeyance and was never again revived.

Although disappointed that his plans were not adopted, he maintained his usual unruffled coolness, and went on with his many other occupations. His activities covered a wide range: the discussion of important questions by the War Staff Group and the Imperial Defence Committee, the interpretation of the fragments of intelligence and the fathoming of the "enemy's" intentions, the working out of plans of operations, and the supervision of such details as the fitting of a cow-catcher on a ship, the perfecting of a new mine, and the construction and means of using nets to catch submarines. Throughout that dismal winter he was unremitting in his exertions, taking no leave even for a day at Christmas, but always buoyant, cheerful, and undismayed. In a private letter of the 14th of February, 1915 (a part of which has already been quoted), he wrote:

". . . We are anxiously waiting to see what is going to become of the German submarine threat after the 18th. If they shoot at sight they will, I think, get a good many merchant ships, but not enough to seriously affect trade. Most of the mischief is done by false reports which divert patrols from the proper places. There are at least twenty false reports of submarines for one real one. . . . I think in time we shall keep them out of the English and Irish Channels, but I don't see yet how we can block their ports and keep them out of the North Sea."

The only evidence, so far available, as to his opinions of the proposed operations at the Dardanelles, or of

the share he took in their origin, inception, and conduct, is to be found in the published (and censored) Report of the Special Commission which sat a year and a half afterwards to inquire into the circumstances, when the freshness of recollection was dimmed. He certainly did not oppose it at the War Council, as he did not think it was his business to express an opinion there unless asked to do so—a doctrine he shared with Lord Fisher, but from which the Commission dissented, though not unanimously. He stated in his evidence: "I thought other things might be better, but both the First Lord and I recognized that it was not my business to interfere, and if they decided on a plan all I was to do was to help them to the best of my ability . . ." also: "I never recommended it. I never strongly resisted it because it was not my business to do so, but so far as I did remark on it I was against it," and that "the question of the Dardanelles had never been put to me definitely at all. Sir Henry Jackson was working at the details of the scheme, and I was looking at the details of others."

The growing tension between the First Lord and the First Sea Lord, caused by the prosecution of these operations, came to a head on the 14th of May, when the War Council decided to continue them and to divert more ships to the purpose. Lord Fisher "was faced at last by a progressive frustration of his main schemes of naval strategy," and the following day resigned his office, and departed from the Admiralty without waiting for a successor to relieve him of his duties. Sir Arthur's account of the events of the next few days is given in the following letter:

"*22nd May*, 1915.

"Fisher's bombshell has done us more harm than a big defeat, and I don't know yet in the least what will come of it.

"He sent in his resignation and left the Admiralty

. . . without troubling himself to think how the work would be affected.

"When I saw Mr. Churchill on Sunday morning he told me that Fisher had gone, and asked me to take office as First Sea Lord. After a good deal of hesitation I agreed, and the Prime Minister said he was very pleased, and I thought the matter would be settled the next day, but on Monday decided to postpone my decision, and a general shuffle of the cards and a National Government was decided. I then wrote to the Prime Minister to say that although I had undertaken to serve under Mr. Churchill, I could not take up the responsibilities under a new man as I was not strong enough.

"Since that nothing has been settled, except that Mr. Churchill is to go. I believe Mr. Balfour is to take his place, but am not certain. No one knows who is to be First Sea Lord.

"In the meantime I am helping the Second Sea Lord to do the First Sea Lord's work as well as his own, and we are working very amicably together, though I have no authority.

"The situation will be very dangerous until the new men, whoever they are, have taken up their appointments, and have got a grasp of their work."

The dangers of an anxious week were thus tided over. They were none the less real because no emergency arose to call for a prompt and important decision. That might have happened at any moment, and it was a courageous act, quite in keeping with his past career, for Sir Arthur to take over the responsibility in such uncertain circumstances with the knowledge that it had been decided to continue a policy that he did not favour ; nor was the merit of his acceptance of the office effaced by his subsequent early withdrawal from it, for he remained in virtual control until means could be found to relieve him, and the assistance he thus rendered was a great service to his colleagues, to the Government, and to the country.

After Mr. Balfour and Sir Henry Jackson had joined the reconstituted Board, Sir Arthur continued his

former voluntary services, occupying a room in the Admiralty building, having the privilege of entering the War Room, and being consulted on important subjects whenever the occasion called for his advice; but after a time, he gradually withdrew from taking any part in the control and direction of higher affairs, and devoted his time more and more to collaborating with others on plans for minor operations, to the study of technical problems connected with mines and anti-submarine defences, and to experiments with new gear. He made a close study of the movements of "enemy's" submarines, tabulating all the information which was received about them, and by reference to this, forecasting their future movements. These deductions were frequently borne out, and materially assisted in saving loss of shipping, also in enabling the submarines to be hunted. Another of his interests was the laying of deep minefields, over which surface vessels could pass without risk of injury, but which were dangerous to submarines when forced to dive.

He became in fact an unofficial Staff officer, unattached to any particular office, and ready to give help wherever it was wanted, but working principally with the Chief of the Staff. "There is no man in this building," said this officer one day, "who I would rather trust to thrash out a difficult problem than Sir Arthur Wilson." He was also in frequent consultation with Vice-Admiral Sir Reginald Bacon on the manifold activities of the Dover Patrol, and minor operations on the Belgian Coast, and Sir Reginald has borne equally high testimony to the value of his co-operation in the following extract from the Preface to his book, "The Dover Patrol."

"In Admiral of the Fleet Sir Arthur Wilson I had a most constant and valuable friend whose knowledge and shrewd judgment were unrivalled, and to whom I was indebted for much wise counsel. Rarely did I visit the Admiralty without seeing him and having the benefit of his views on any matters that were on hand."

It was a heavy physical strain for a man of his age, and after a further eighteen months of uninterrupted application, the signs of it were evident. The sight of one eye was going, and an examination of it by an oculist in September, 1916, showed that a cataract had developed, but he put off having it removed, saying, "I should be very sorry to have to lay up for a month while there is work to do."

When, however, Sir John Jellicoe became First Sea Lord, and a number of changes were made in the methods of conducting the war, the occasion seemed favourable, and he underwent the operation on the 1st of January, 1917. He might well have retired from his self-imposed task with honour, but the spirit of the man was indomitable; while there was work to be done he could not bear to leave it, and though he went home for a week while convalescent, as soon as the oculist would allow him to do so, he went back to his office and resumed his work.

He knocked himself up for a month in August, by spending two days at Spithead on board a trawler when he had a bad cold, and then going off to Leeds to inspect the manufacture of a new mechanism before he was cured of it, but, otherwise, he worked on steadily for another year.

The departure of old friends from the Admiralty was a sad blow, and in December he wrote:

". . . The dismissal of Sir John Jellicoe is a disgraceful concession to an unscrupulous press agitation, and they have also dismissed Bacon from Dover, who was far the best man in the Navy for that particular work. I think Oliver will also go, so we shall have lost the three ablest men in the Navy. My work is now so comparatively unimportant that it is not likely to make any difference to me, except that I lose three friends with whom I was in constant consultation. I shall remain as long as I think I can be of any use at all, but I am just now feeling rather despondent."

Six months later he wrote again:

"*27th June*, 1918.

". . . I think my work at the Admiralty will be soon coming to an end now. I am nearing the end of my last job, and I have not undertaken any fresh work for a long time . . ."

And again, on the 18th of August:

". . . I have now to tell you that my work here has come to an end rather suddenly, as the Admiralty have decided not to go on with the work that I was doing."

Thus the end had come, and after another week spent in winding-up his official and personal affairs in London, he went home to a well-earned rest at Swaffham.

He had done his bit. Throughout his career he had set an example of unflagging attention to duty, regardless of all personal aims, and in his prime he had stamped on the Service the impress of his high character and personality as surely as had the masters of the past. He had promptly responded to the call for his advice and counsel at a critical moment, and when in the rising storm fresh hands and brains were placed at the helm, he manned and laboured at an oar till the danger was spent.

He resumed his former quiet life at home, finding occupation and exercise in getting back into order the small golf course that he had helped to lay out formerly, of which, for want of other labour, he made himself green-keeper and groundsman.

When the peace came with the proclamation of the Armistice, he entered with keen interest into all the local projects for helping the returning men to get back to their work, and took a leading part in the erection of a handsome cross in the market-place, and of a painted window and tablet in the Parish Church to the memory of those who had fallen, helping not only with his purse and influence, but contributing

largely to the actual designs. He loved the quaint old town in which he was born, and he took a delight in promoting the social welfare of its inhabitants, both ex-Service men and civilians, at the United Club, of which he was the energetic and hardworking Chairman. The times did not lend themselves to hospitality well, the memory of the Food Control was not yet forgotten, but he was seldom without at least one visitor staying in his house, and no claim or appeal for help that was brought to his notice was ever sent empty away without his very careful inquiry into its merits.

He succeeded to the baronetcy on the death of his brother, Sir Roland, in October, 1919, and when Their Majesties gave that famous garden-party at Buckingham Palace, on the 26th of June, 1920, to which they invited all holders of the Victoria Cross, he went up to London with his sister to attend it, being the highest in military rank, and the ninth from the head of the list of all those present.

He also attended the ceremony in Westminster Abbey of the Installation of the Order of the Bath, though he declined the honour of having his banner and arms placed in King Henry VII.'s Chapel, to which he was entitled as one of the forty senior Knights Grand Cross.

To his friends and acquaintances he seemed to be still active and vigorous, with the prospect of many happy and contented years before him, until early in May he caught a slight cold. On Whit Monday he made a speech, and gave away the prizes at some local sports, and for a few days he continued to get about as usual, but on the following Friday, feeling unwell, he remained in bed and sent for the doctor, who after examining him, declared one lung to be affected. On the Monday morning he got up and went downstairs in his dressing gown to write some notes and cheques. Pneumonia set in the next day and in spite of the best aid and advice that could be

given, he rapidly sank, and on the afternoon of Wednesday, the 21st of May, passed quietly away.

"*There went a true heart in Arthur Knyvet Wilson.*"

In stature and weight, he was a man of about five feet nine inches, and perhaps eleven stone, with a sturdy upright figure that never leaned against a post or on a stick; often careless of his dress and appearance, and showing a fondness for old clothes; alert and attentive in conversation, or when watching an event or object in which he was interested, but at other times meditative and heedless of his surroundings. On board a ship, no rattling nor creaking, nor noise of men moving about over his cabin ever seemed to disturb his thoughts or his sleep. His love of shooting and outdoor games has already been mentioned, and it has been said that he was a good chess player in his younger days. A courteous and hospitable host, and an interested listener who spoke little, but who had a remarkable gift of readily and exactly expressing his thoughts without emphasis or gesture when occasion called for it; a gift that was often shown in the rapid and unhesitating way he would right an order or signal, always using a minimum of words, but perfectly clear in its meaning.

He was always known as a liberal subscriber to any institution or to any sports or entertainments got up to promote the welfare of the Fleet or of his ship, but his generosity went far beyond that; several instances have come to light, in the course of collecting information for this book, and there are doubtless many others, for in these matters he literally did not allow one hand to know what the other was doing. His wishes must be respected, but it may, nevertheless, be permitted to state that one of his kind acts was to buy an annuity of £50 for an old shipmate, a petty officer who had been discharged without a pension, and almost his last conscious act was to make out those cheques, on the last Monday morning, to some of his beneficiaries.

ARTHUR KNYVET WILSON[1]

God rest thee well, great Sailor, guard thy sleep
In that sure haven where thy soul would be.
With proud thanksgiving England thinks of thee,
Strong keeper of her guard upon the deep.

Thy soul seemed granite, and thy brain was steel,
But years had brought great softness to thy heart,
And to thy interests, high, aloof, apart,
Had added kindness, which all men could feel.

O England, mourn to-day a goodly son.
O Norfolk, home of Nelson, thanks to thee,
Who givest us such Masters of the sea,
To give their lives that duty may be done.

And Swaffham, little town of lowly fame,
Thank God, that in the passing of quiet days
Thy stock hath bred a Hero—one whose ways
Across the wide seas consecrates thy name.

May 25th, 1921.

---

[1] By kind permission of the Rev. Canon F. Keeling Scott, Vicar of Swaffham.

MEMORIAL BRONZE TABLET ERECTED IN SWAFFHAM CHURCH.

INDEX

A BAD patient, 53
Active, H.M.S., gun accident, 100
Admiralty: new post at, 106-7; appointed to *Vernon* from, 109; minute on loss of *Victoria*, 129; offer of controller ship, 139; composition of Board, 139; cruiser construction, 143; Belleville boilers, 147; the Royal Yacht, 149; shortcomings of, 151; Lord Selborne First Lord, 151; request for remarks, 163; directions to proceed with exercises, 170; Sir John Fisher at, 174; testing submarines, 190; drift nets, 193; issue of warning telegram by, 195; memorandum of December 6, 1904, 197; order to cease work on the *Montagu*, 216; First Lord of, at Weymouth, 249; successor to Lord Fisher, 224; Sir A. Wilson becomes First Sea Lord, 225; composition of Board, 226; establishment of War Staff, 227; change of Board, 228; minute on War Staff, 229 *et seq.*; War Staff group at, 241; voluntary service at, 245; changes at, 246-7
Albani, Madame, at Malta, 31
Alderney, attack on, in manœuvres, 159
Alexandra, H.M. Queen, at Copenhagen, 204
Alexandra, H.M.S., 60
Alexandretta, the stone from, 63
Alexandria: riot at, 65; bombardment of, 66-7; operations at, 68 *et seq.*, 80
Algiers, H.M.S.: joins, 6; leaves, 7; shipmate in, 16
Allan, Mr., member for Gateshead, 147
Arabi Bey, 65, 68, 69, 71, 72, 73, 81
Arctic Expedition, return of, 52
Argostoli, 56; manœuvres off, 175 *et seq.*
Armoured train: the first idea of an, 69; improvements in, 70, 71; who originated the, 75
Arosa Bay: visit to, 168, 179; sport at, 190, 191; Channel Fleet at, 207, 218
Arthur, Captain W.: Whitehead torpedo committee, 28; captain of *Vernon*, 47; making of torpedo nets, 50; recommends promotion, 54
Athens, visit to, 121

Baalbek, visit to, 124
Bacon, Admiral Sir R.: Captain of Submarine School, 189; consultations with, 245; loss of services, 246
Baker Pasha, 81, 84, 86
Balaclava, 5, 7
Baltic, cruise in, 200, 202 *et seq.*
Bath, Companion of, omission from list, 80; created, 109; Knight Commander of, 172; Grand Cross 221; installation of order, 248
Battenberg, Admiral Prince Louis of command at Argostoli, 175; Second Sea Lord, 227; First Sea Lord, 240; resigns, 241
Battle practice: annual exercise, 177, 189; presented challenge cup for, 197; preparation for and performance of, 206
Beaufort testimonial, the, 20
Bedford, Vice-Admiral Sir Frederick, 139
Belleville boilers. *See* Boilers
Berehaven: course of mining at, 83, 95; salving a live torpedo, 97; joining squadron, 156; mode of going out of, 157; occupations at, 165; departure from, 166; arrival of German fleet, 166; assembly at, 179; return to, 180; manœuvres from, 185; range for calibrating guns, 198, 205; an exciting boat race at, 217
Beresford, Lord Charles, 73, 74, 122; an opponent, 161, 162; succeeded by, 180; meeting with, 183, 186; command of Mediterranean Fleet,

209; manœuvres off Lagos, 209, 210; criticisms of Sir John Fisher's administration, 223; advocate of War Staff, 228
Berners, Baron, of Didlington and Ashwellthorpe, 1
Beyrout, 124
Board of Admiralty. *See* Admiralty
Boat races: a dead-heat, 43; regatta, 118, 121, 131, 160, 172, 194, 195; exciting contest, 217
Boilers: subject of, 146 *et seq.*; Belleville, 147, 152 *et seq.*
Bosanquet, Admiral Sir Day, 212
Bourke, Capt. the Hon. M., 124; Flag-Captain, 127
Boyana River, 59
Brandy, his dog, 69
Bridge, Admiral Sir Cyprian, viii; Commander of *Caledonia*, 31 note; wreck of *Psyche*, 32-3
Bridgeman, Admiral Sir Francis: Second Sea Lord, 226; First Sea Lord, 227
Briggs, Admiral Sir Charles, 226-7
Britannia, H.M.S.: appointed First Lieutenant, 27; improvement in discipline, 28
Britten, Admiral R., Flag-Captain, 96; shooting with, 137
Broadly, Mr., 81
Buckle, Captain, at Yedo, 24
Buller, V.C., Colonel Redvers, 77, 88, 89
Bush, Admiral Sir Paul, commander of *Sans Pareil*, 124

Calcutta, H.M.S.: flagship in China, ordered to join, 9; ordered home, 14; at St. Helena, 15; a good school, paid off, 17; old shipmates, 22
Caledonia, H.M.S.: appointed to, 31; combined cruise, 37; paid off, 37
Calibrating heavy guns, range for, 198, 205
Camperdown, H.M.S., 121, 125, 126
Canton, attack on, 9, 11
Cape of Good Hope, the, 8, 15, 43, 100; arrival at, 101; extent of station, 102; target practice at night, 104; no telegraphic communication with the coast, 106; departure from, 106
Cephalonia, 58
Channel Fleet: old captains of, 183; part of, in manœuvres, 185; Lagos and Lisbon, 187; second division of, 195; Home Fleet becomes, 197; review at Cowes, 199; cruise in North Sea and Baltic, 200 *et seq.*; combined exercises, 207 *et seq.*; Grand Manœuvres, 214; at Lagos, 219; end of command of, 220-1
Channel Squadron: offer of command, 154; handling of, 157 *et seq.*; junction with Mediterranean Fleet, 160; parts company, 165; combined with Home and Cruiser Squadrons, 170; operations off Argostoli, 174 *et seq.*; stay at Gibraltar, 177; at Lisbon, 179; departure from command, 180
China: active service, 7; dispute with, 9; operations, 10 *et seq.*
Churchill, Rt. Hon. Winston S.: succeeds Mr. McKenna as First Lord, 226-7; question of War Staff, 229; invitation to Fisher, 241; leaving Admiralty, 244
Cochran, Captain of *Caledonia*, 31, 32, 33, 37
Colossus, H.M.S., search for a dog, 7
Constantinople, visit to, 117 *et seq.*, 131
Controller, 108, 111; Sir John Fisher as, 139; offer of post, 139; the department of, 140-2; overworked, 149; defence of department, 151; inquiry into, 152; opinion of, 153, 154; visits Montagu, 213; accompanies First Lord to Weymouth, 219
Corfu, 56, 64, 81, 129, 132
Countermining. *See* Mining
Court-martial: prisoner's friend at, 40; loss of *Victoria*, 127-8
Crimea, the: operations in, 6; visit to, 7

Destroyers, 134 *et seq.*; new class of, 146; dangers of attack by, 163; despatch of, under Keyes, 170; combining with battleships, 171; exercise, 172; convoy of, 174; use of flotillas of, 175 *et seq.*; flotillas in home waters, 181; formation of fleet to evade attack, 176, 190; value of, against submarines, 193; command of, 194; assembly at Portland, 196; use of, 240
Director of Naval Ordnance, change of name, 107, 155
Director of Torpedoes, offer of new post, 106
Domville, Admiral Sir Compton: Commander-in-Chief, Mediterranean, 174-5; Atlantic manœuvres, 186

Dowell, Mrs., 3; Miss, 53; Admiral Sir William, 3; Commander, 12; commanding Channel Squadron, 66, 70, 73, 80
Dreyer, Capt. F. C., Gunnery Lieutenant of *Exmouth*, 222
Dublin, review at, 182-3
Durnford, Admiral Sir John, letter to, 184
Duke of Edinburgh, H.R.H. the, at ceremony of presenting the V.C., 95; commanding Channel Squadron, 96; remarks by, 98

Edinburgh, H.M.S., 125
Edward VII., H.M. King: tour in India as Prince of Wales, 43, 45; interview with, 149; message from, 154: greeting the Duke of Cornwall, 167; approval of royal yacht, 167; coronation of, 170; review of fleet, 173-4; at Dublin, 182; at Queenstown, 185
Egerton, Admiral Sir George, Second Sea Lord, 226-7
Egypt: condition of, 65; revolt in Soudan, 84
El Teb: defeat of an expedition, 84; action at, 85 *et seq.*
Engineering strike, 140-1
Esquimalt, description of, 18
Eton, 4; brother's scholarships, 21; an old schoolfellow, 24
Evan-Thomas, Admiral Sir Hugh, Flag-Lieutenant, 129
Examination: naval cadet, 4; three-yearly, 17, lieutenant, 19, 20
Excellent, H.M.S., 2, 20, 22, 28, 29; promotion from, 40, 46; instruction course, 184
Exmouth, H.M.S., vii; flagship, 194; winner of challenge cup for battle practice, 197; at Portsmouth, 198; royal visit to, 204; gunnery-lieutenant of, 206, 222; combined exercises, 207; leaves Berehaven, 210; at Lundy Island, 211; ship's company's cheers, 218

Falkland Islands, visit to, 43
Fisher of Kilverstone, Lord: staff officer in *Excellent*, 22; Commander, 47; Captain of *Inflexible*, 65; armoured train, share of, in, 69, 70, 75; operations with, 72; illness of, 77, 80; Director of Naval Ordnance and Torpedoes, 107; Controller, 139; Commander-in-Chief at Lagos, 160; arguments for reinforcing his fleet, 163; his young men, 165; projected operations of, 174; reforms of, 184; Commander-in-Chief, Portsmouth, 191; created a peer, 223; suggests his successor at the Admiralty, 224; becomes First Sea Lord again, 241; resignation, 243
Fiume, experiments at, 28; visit to, 60, 61, 81; new pattern torpedo, 82, 84

Gallwey, Captain: expert in torpedo work, 110, 111
Gatfield, Walter, fell overboard, 43
Genoa, fête at, 119 *et seq.*
George V., H.M. King: Duke of Cornwall, 167; Prince of Wales, 173; King, 228
Germany: fleet of, at Berehaven, 157, 169; demonstration against France, 198; warning to make a descent on coast of, 199; visit to ports, 201 *et seq.*; plan of operations against, 237; the Great War with, 239 *et seq.*
Gibraltar, 116, 131, 133; Channel Squadron at, 165, 168, 174, 177 *et seq.*
Gill, Sir David, Astronomer Royal at the Cape, 103, 105
Gladiator, H.M.S., appointed to, 22
Goodenough, James G.: lieutenant in *Raleigh*, 8; expedition to Canton, 10 *et seq.*; Commander of *Calcutta*, 14
Goodford, Dr., tutor at Eton, 4
Goschen, Right Hon. G. J., First Lord, 139, 148, 149, 150, 151
Graham, Major-General Sir Gerald, 85, 88
Groome, Rear-Admiral R. L., presents a cup, 217
Gunnery: problems in 1871, 35; instrument for improving, 36; effects of smoke, 103; recognition of, 160; practices, 177, 187; challenge cups for good, 197; practices, 217; high standard of, 240

Hecla, H.M.S.: torpedo depot ship, 55; unhandy ship, 56; at Fiume, 60, 61; at Malta, 62, 63; Levant, 62, 63; at Malta, 64, 65; at Spithead, 65; ordered to Malta, 66; at Alexandria, 66 *et seq.*; at Port Said, 76; at Ismailia, 77; at Port Said, 80, 81; Corfu and Fiume, 81, 82; a smart rescue, 82; at Malta, *ibid*; at Spithead, 83;

Berehaven, 83; at Fiume, 84; at Malta, 84; passage to Trinkitat, 85; off Suakin, 90; at Portsmouth, 94; Berehaven, 96; acts as parent ship, 98; transfer of command, 98; to Captain Jeffreys, 110
Heligoland, opinion as to taking, 239, 240, 242
Heliograph for use at sea: invention of, 182; occasion of use, 187
Henry, Prince, of Prussia, 157; dinner to, 169
Hermione, H.M.S., flying his flag, 135
Hewett, V.C., Rear-Admiral Sir William, 88, 90
Hodgson, Dr., Provost of Eton, 13 note
Home Fleet: appointed Commander-in-Chief, 180; composition of, 181; occupation of, 182; manœuvres, 185 *et seq.*; at Portland, 187; operations against submarines, 190 *et seq.*; composition of, 194; use of Portland, 196; change of name, 197
Home Squadron: manœuvres with, 170 *et seq.*; composition of, 181
Hong Kong, 9, 10, 13, 23
Hopkins, Admiral Sir John O., captain of *Narcissus*, 37
Hornby, Admiral Sir Geoffrey, presents the V.C., 95
Howe, Admiral the Hon. A. Curzon-, commander of *Raleigh*, 105
Hunt Grubbe, Admiral Sir Walter, Commander-in-Chief at the Cape, 100, 106

Imperial Defence, Committee of, a member of, 223, 241
Imperieuse, H.M.S., command of, 109
India: visit of Prince of Wales, 43; visit, up-country, 46
Inflexible, H.M.S., 50, 65, 92

Jackson, Admiral of the Fleet Sir Henry, 243; First Sea Lord, 244
Jackson, Admiral Sir Thomas S.: midshipman in *Calcutta*, 13; lieutenant, 22
Japan: mission to, 23; return from, 27
Jeffreys, Admiral E. F., Captain, 109, 110
Jellicoe of Scapa, Admiral of the Fleet, Viscount: Commander of *Sans Pareil*, 116; of *Victoria*, 123-6; Board of Admiralty, 226; Commander-in-chief Grand Fleet, 241
Jerningham, Sir Hubert, Governor of Mauritius, 138

Kane, Admiral H. C., gunnery officer of *Lord Warden*, 36; compiled manual of submarine mining, 47
Kennedy, Admiral Sir William, lieutenant in *Calcutta*, 16
Keppel, Admiral Sir Harry, Commodore in China, 7 *et seq.*; Commander-in-Chief in China, 24
Key, Admiral Sir Cooper: Captain at Canton, 12; Rear-Admiral at Malta, 33-4; First Sea Lord, 55, 80
Keyes, Rear-Admiral Sir Roger, command of a flotilla, 170

Ladder boom, trial of, 112
Ladder Hill, St. Helena, 16
Lagos, Coast of Africa, 2
Lagos, Portugal, 160, 185, 187; cruise to, 198; large fleet at, 208
Lambert, Captain Edward, *Caledonia*, 37
Lambert, Rear-Admiral Rowley, 43
Laughton, Sir John, 17
Lecture on improvements in watertight subdivision, 129, 130, 139
Levant, 36; a cruise in, 62, 121, 128, 130, 132
Lisbon: visit to, 179; presenting an address at, 187
Lord Warden, H.M.S., flagship, Mediterranean, 31, 36

Madden, Admiral Sir Charles, Fourth Sea Lord, 226-7
Madeira, Island of, 8, 17, 101; cruise to, 180; Channel Fleet at, 185
Majestic, H.M.S., 142; flagship, 156; at Spithead, 172; a boiler giving out, 177; leaving the, 180
Malta: 5, 7, 34, 35, 56, 62, 63, 64, 65, 66, 78, 80, 82, 84, 91, 92, 116, 118, 121, 123, 124, 126, 128, 129, 130, 131, 132, 174, 175
Man overboard: H.M.S. *Topaze*, 18; H.M.S. *Raleigh*, 43, 105
Markham, Admiral Sir A. H.: Captain of *Vernon*, 89; present of a new sword, 91; transfer of duties to, 100; Rear-Admiral, 125-6
Mauritius: convoys High Commissioner to, 106; survey for dry dock, 137-8
May, Admiral of the Fleet Sir

William, controller, 155; Commander-in-Chief Atlantic fleet, 205
May, Rear-Admiral H. J., Captain of R.N. College, plotting tactical movements, 172
Measles, remedy for, 63
McKenna, Rt. Hon. Reginald, First Lord, 224, 226-7, 229
Mersey, H.M.S., used for trials of submerged tube, 108
Milford Haven, torpedo manœuvres at, 135-6
Mining, submarine: study of, 36; school of, 47; naval system, 48; countermining, 49; drill in, 56; at Berehaven, 83; exercises, 131; a new mine, 242; deep sea, 245
Mission to Japan, 23, 25, 27
Montagu, H.M.S., wreck of, and operations to refloat, 211 *et seq.*

Narcissus, H.M.S., first lieutenant, 37; damaged in gale, 39; times of evolutions, 41; flagship, 42
Navarino: battle of, 2; visit to, 129
Navy League, 148; agitation got up by, 150-1
Nelson, Lord, family connection with, 3
Noel, Admiral of the Fleet Sir Gerard: Captain of the *Nile*, 117; Fourth Sea Lord, 139; opponents in manœuvres, 158; command of Home Squadron, 170
Norcock, Vice-Admiral C. J., Lieutenant in *Hecla*, 69, 73, 74, 77

Oberon, H.M.S., used for torpedo experiments, 28, 30
Olympia, visit to, 58
Osman Digna, 84, 90

Pakenham, Admiral Sir William, Fourth Sea Lord, 227
Palmas Bay: boat races at, 131; meeting of fleets, 177
Parkes, Sir Harry, description of, 25, 26, 27
"Pioneer," invention of, 113 *et seq.*
Plymouth: sails from, 17; gale at, 38; *Raleigh* at, 100; *Hermione* at, 135, 137
Poë, Admiral Sir Edmund S., second in command, 181; succeeded by Rear-Admiral Barlow, 194; commanding First Cruiser Squadron, 196
Poore, Admiral Sir Richard, arrival with third division, 198
Portland: torpedo-boat manœuvres, 8; boom for harbour of, 112; place of assembly, 158, 159; unsafe for *Ophir*, 167; Home Squadron at, 170; Channel Squadron departs from, 174; Home Fleet assembles at, 181, 187, 188; entering at night, 189; sails from, 190; base for practices, 196; exercising communications with, 211; gunnery at, 217
Port Said, 75, 76, 78, 80, 81, 85
Portsmouth: Naval College, 2; examination at, 4, 20; presentation of Victoria Cross, 94; return to, 98; boom experiments at, 112; *Majestic* at, 156, 167; review at, 173; disembarks at, 180; *Revenge* at, 181; submarine school at, 189; submarine operations, 191 *et seq.*; arrival at, 198; French Fleet at, 200; farewell speech at, 221
Powerful, H.M.S.: passage to Malta, 5; boilers of, 147; passage to China, 147
Promotion: of his father, 3; of himself to Lieutenant, 20; "haul down" vacancies, 40; to Commander, 41; to Captain, 54; to Rear-Admiral, 134; to Vice-Admiral, 158; to Admiral, 198; to Admiral of the Fleet, 221
Psyche, H.M.S., grounding and loss of, 31 *et seq.*

Raleigh, H.M.S.: commissioning under Keppel, 7; loss of, 9; fitting out under Tryon, 48 *et seq.*; man overboard, 43 *et seq.*; leaving, 47; news from, 53; appointed captain of, 100; passage to Cape, 101
Randolph, Rear-Admiral G. G., 42
Rawson, Admiral Sir Harry: Midshipman, 13, 15; Lieutenant, 22; Transport Officer, 77; Vice-Admiral Channel Squadron, 155-6
Rawson, Lieutenant Wyatt, 52, 78
Renown, H.M.S., Sir J. Fisher's flagship, 160
Revenge, H.M.S.: flagship of Home Fleet, 181; Their Majesties of Portugal on board, 187; at Arosa Bay, 191; at Portsmouth, 194
Richards, Admiral of the Fleet Sir Frederick, 139, 145
Riding parties at Malta, 124
Robinson, Sir Hercules, High Commissioner and Governor of South Africa, 106
Rodney, H.M.S., 7, 23, 24; Flag Captain in, 110
Royal Sovereign, H.M.S.: visit of

Queen to, 29; Home Squadron, 181, 194
Royal Yacht, building of, 140; accident to, 148-9, 154; the King's approval of, 167-8; investiture on board, 173

Sail drill and exercises aloft, 31, 37, 41, 47, 98, 218
Sailors' Home at Weymouth: origin of, 196; opening ceremony, 219
Salvage operations: H.M.S. *Psyche*, 32; *Psyche's* boilers, 34-5; H.M.S. *Montagu*, 212 *et seq.*
Sans Pareil, H.M.S.: commissioned, 116; at Genoa, 118 *et seq.*; at Athens, 121; changes Commander, 123; at Malta, 124; position in fleet, 125; becomes flagship, 126; private ship again, 129; in Levant, 130; at Malta, 131; cruising, 132; return home, 133; hoists his flag in, 137; at sea, 186
Scilly Islands: entrance to anchorage, 158; visit to, 194
Scutari, Montenegro, 59
Sebastopol, operations at, 6, 7
Securing the bowsprit in a gale of wind, 39
Selborne, Earl of: First Lord, 151; on boiler questions, 153; offers command of Channel Squadron, 154
Seymour, Admiral of the Fleet Sir Edward, Midshipman, 14, 17, 137
Seymour, Admiral Sir Beauchamp, Commander-in-Chief, Mediterranean, 59; speech by, 80
Seymour, Admiral Sir Michael, Commander-in-Chief, China, 9
Seymour, Admiral Sir Michael Culme, Commander-in-Chief, Mediterranean, 126, 128, 131, 133
Shipbuilding: extensive programme, 140; battleships, 142; armoured cruisers, 143 *et seq.*
Simon's Bay, 101; description of, 103; return to, 105; detained at, 106; site of dry dock, 139
Sports: in Ionian Islands, etc., 36, 57; at the Cape, 103, 105; Scotland, 115; at Kenswick, 137; on west coast of Scotland, 187; at Arosa Bay, 190
St. Helena: a riding excursion, 15; *Raleigh* rejoins at, 43; visit to, 105; leaves *Raleigh* for home, 106
Stanhope, Captain, death of, 37
Sturdee, Admiral of the Fleet Sir Doveton: Lieutenant in torpedo-boat attack, 111; jumping a boom, 111 *et seq.*; applied for as Commander, 124
Suakin, 84, 90
Submarines: introduction of, 146; demonstration by, 189; operations to test, 192 *et seq.*; German, 239, 242; study of movements of, 245
Submarine mines. *See* Mining
Submerged torpedo tubes fitted in *Inflexible*, 50; committee on, 100; trials in *Mersey*, 108; trials in Vulcan, 111
Swaffham, 1, 3, 4; home at, 45; church gates, 53; reception at, 92 *et seq.*; retires to live at, 222; King sends a present to, 225; return to, 227; when war broke out, 239; rest at, 247, 250

Tactics: of a fleet, 117, 157, 159, 162; views on, 171; plotting movements, 172
Target practice, 18; at night, 104; battle or long range, 177; at Portland, 196
Targets, towing, 187; a new pattern, 188
Tel-el-Kebir, battle of, 77, 78
Telephones, the making of, on board the *Vernon*, 50
Tetuan: fine weather, 168; visit to, 177
Thaso: search for a boat, 123; cruise to, 128-9
"Three Ones," coveted distinction gained, 20
Thrupp, Rear-Admiral Arthur, 3
Torpedo: committee to investigate and experiment with, 28, 30; outrigger, 36; school of instruction in, 46; general use of name, 47; the Whitehead, 49, 50; director to aim, 50; nets, 50; lieutenants, 51; manual, 54, 57; depot ship, 55, 111; apparatus for discharge, 50, 61; range for, 64; store of, 69; experiments with, 82; Assistant Director of, 107; hook bracket, 109; introduction of larger pattern, 110; improvement of, 111; invention of "pioneer," 113; manœuvres, 135-6
Torpedo-boats, 50, 55, 56; attack by, 60; bow tube, 61; attack of fleet, 112; jumping at boom, 112 *et seq.*; trial of, 134 *et seq.*; destroyers, 134 *et seq.*; towing, 157; dangers of attack by, 163-4
Torpedo Design Committee, 110

Torpedo Discharge Committee, chairman of, 100; conducting trials, 108
Tracey, Admiral Sir Richard, Commander and head of mission to Japan, 23; return to England, 27; Rear-Admiral in manœuvres, 110
Trinkitat, 84; arrival at, 85; return of troops to, 90
Truck semaphore, invention of, 129
Tryon, Vice-Admiral Sir George, Captain of *Raleigh*, 42 *et seq.*; letter from, 53; Captain of *Monarch*, 64; manœuvres, 112; Commander-in-Chief, 116; visit to Sultan of Turkey, 117, 122, 123; 125, 126

Vernon, H.M.S.: torpedo school, appointed to, 46; separation from *Excellent*, 47; making of telephones, 50; a show ship, 51; a popular ship, 52; presentation of a sword by Captain and officers of, 91; became Captain of, 109; variety of work, 114
Victoria, H.M. Queen: visits *Royal Sovereign*, 29; display for, at Cowes, 51; message from, 95; Jubilee review, 109; disappointment of, 149
Victoria, H.M.S.: flagship in Mediterranean, 116; loss of, 125-6; court-martial, 127
Victoria Cross, the: recommended for, 88; announcement of award, 92; presentation of, 95; Her Majesty's message, 95
Victory, H.M.S., 5
Vigo: rendezvous at, 39; climate of, 168; Home Fleet at, 190; Channel Fleet at, 207; Christmas at, 218
Volo, Gulf of, 121; exercising attack of ships, 122; relief at, 123; visit to, 128, 130
Vulcan, H.M.S., torpedo depot ship, trials of submerged tube, 111

Wells, Captain Sir Lionel, Lieutenant in torpedo-boat attack, 112; Commander, 123
White, Sir William, Director of Naval Construction: guest on board *Sans Pareil*, 117; examination of evidence relating to loss of *Victoria*, 129; design of ships, 142; armoured cruisers, 143; royal yacht, 149
Whitehead, Mr.: inventor of torpedo, 28; detained in France, 29; at Fiume, 61; new pattern torpedo 110; contrast with, 111
Wilson: family of, 1 *et seq.*; General Sir Archdale, baronet, 2; Knyvet, 2; Roland, death of, 21; William, death of, 22
Windsor, residence at, 4
Wolseley, Sir Garnet, 43, 73, 75, 78, 79

Yonge, Rev. William, 3

NOTABLE BIOGRAPHIES.

LORD BYRON'S CORRESPONDENCE.

Chiefly with Lady Melbourne, Mr. Hobhouse, the Hon. Douglas Kinnaird and P. B. Shelley. Edited by John Murray, C.V.O. "A just and careful edition of letters that add to our knowledge of Byron and our admiration for his writing."—*The Times*. With Portraits. Second Impression. 2 Volumes. 25s. net.

MEMORIES OF THE XIXTH CENTURY.

By the Earl of Meath, K.P., G.B.E. "Remarkable for the quality and quantity of anecdotes collected by the author, whose travels in Europe, America, and Australia and experience in the Foreign Office make him a most interesting raconteur."—*Evening News*.

Portraits and Illustrations. 18s. net.

JANE WELSH CARLYLE

Letters to her Family 1839–1860. Edited by Leonard Huxley, LL.D. No woman ever excelled Mrs. Carlyle as a letter writer. The discovery of a great store of her still unpublished letters is therefore an event of first-rate literary importance. [*Ready Autumn* 1923.

A ROMANCE OF THE XIXTH CENTURY.

Compiled from the letters and family papers of Baliol, Viscount Esher. By Major C. H. Dudley Ward, D.S.O., M.C. A series of authentic letters and documents, beginning with the love letters of Dora Best, in the days of Napoleon the Great, to George Brett. With Illustrations. 15s. net.

THE PRIME MINISTERS OF BRITAIN

1721—1921. By the Hon. Clive Bigham. "His volume is a perfect treasure-house of good things, well and appositely set forth . . . a truly delightful piece of historical writing, plenteous without being stodgy."—*Spectator*. With full-page Portraits of each of the 36 Prime Ministers. Third Impression. 21s. net.

THE CHIEF MINISTERS OF ENGLAND

920—1720. By the Hon. Clive Bigham, C.M.G., C.B.E. "Of romantic and picturesque quality, a book it would be difficult to over-praise. Rich in the fruits of reading and research, sober and just in judgment."—*Sunday Times*. With 28 Portraits and Illustrations. 21s. net.

BY SIR HENRY LUCY.

THE DIARY OF A JOURNALIST—I.

"Brisk effervescent collections of good stories, pungent criticism, and sometimes sombre reflection that leave the reader unwearied after the most prolonged attack on its pages."—*Daily Chronicle*.

Second Impression. 15s. net.

THE DIARY OF A JOURNALIST—II.

Later entries. "As full of good stories as its predecessor, and all of them freshly told . . . a feast of good things, carefully recorded and told with point and enjoyment."—*Evening Standard*. Portrait. 15s. net.

THE DIARY OF A JOURNALIST—III.

Fresh extracts. This third volume, like its predecessors, is compiled of extracts from Sir Henry's private diary, entered at the dates given and remaining unedited. It may therefore be assured to offer to the reader the same interest as did the other two earlier volumes. 12s. net.

MEMOIRS.

With a Full Account of the Great Malaria Problem and Its Solution. By Sir RONALD ROSS. "His book is one that should be inwardly digested by every student of Empire and by every science worker."—*Daily Telegraph.* Illustrated. 24s. net.

JOHN ADDINGTON SYMONDS.

Addressed Chiefly to Henry Sidgwick and Horatio F. Brown. By HORATIO F. BROWN, Author of *History of Venice*, etc. "Like nearly everything that comes from his pen, they wield a fine spell that obscures all their faults while we read."—*The Times.* Portrait. 12s. net.

THE LIFE OF SIR WILLIAM WHITE.

By FREDERIC MANNING, Author of *The Vision of Brunhild.* His life covers the whole period of naval construction from the beginnings of steam propulsion and of the building of iron ships to the opening of the Dreadnought era, and the fitting of the *Mauretania* with turbines.

With Illustrations.

LIFE OF ADMIRAL OF THE FLEET SIR ARTHUR WILSON, V.C., G.C.B., O.M.

By Admiral Sir EDWARD BRADFORD, K.C.B., C.V.O. The life story of one of the most distinguished British sailors, who was one of those mainly responsible for the splendid efficiency of our Fleet in 1914 and afterwards. With Illustrations.

CATHERINE DE MÉDICIS QUEEN OF FRANCE.

By PAUL VAN DYKE, Professor of History, Princeton University. This life of Catherine de Médicis is the result of ten years' work and study of the sources. Two Volumes. With Illustrations. £2 2s. net.

LADY ROSE WEIGALL.

A Memoir based on her Correspondence and the Recollections of Friends. By her Daughter, RACHEL WEIGALL. Lady Rose Weigall was the last survivor of the intimate friends of the Duke of Wellington and his contemporaries, and from her earliest years lived in the centre of the most distinguished society. Illustrated. 15s. net.

PEOPLE AND PLACES.

By ARTHUR KEYSER. "He has the gift of telling what he remembers with the neatness of form which often makes the difference between a mediocre story and a good one."—*Times.* 16s. net.

TRIFLES AND TRAVELS.

By ARTHUR KEYSER. "The writer is a gay raconteur who has seen most of the civilised world and has a good story to tell of every place he has visited."—*Daily Chronicle.* 10s. 6d. net.

THE LIFE AND WORK OF SIR JAMES KAY SHUTTLEWORTH.

By FRANK SMITH, Lecturer in Education, University of Aberystwyth. Introduction by Sir MICHAEL SADLER, K.C.S.I. "A contribution of permanent value to the history of elementary education and social conditions following the industrial revolution."—*The Times.*

With Illustrations. 18s. net.